Index Number

This Issue Exceeds 175,000 Copies

THE JOURNAL

OF THE

American Medical Association

JANUARY 10, 1959

ORIGINAL ARTICLES

STUDY OF STAPHYLOCOCCIC INFECTIONS OCCURRING ON A SURGICAL SERVICE 99
M. L. Koch, Ph.D., Derward Lepley Jr., M.D., C. M. Schroeder, M.D., and M. B. Smith, M.D.

TREATMENT OF HYPERTENSION WITH CHLOROTHIAZIDE 105
E. D. Freis, M.D., Washington, D.C.

CHLOROTHIAZIDE (DIURIL)—A NEW, NONMERCURIAL, ORALLY GIVEN DIURETIC 109
J. W. Keyes, M.D., and F. J. Berlacher, M.D., Detroit

CHLOROTHIAZIDE AND PREMENSTRUAL TENSION 112
E. C. Jungck, M.D., W. E. Barfield, M.D., and R. B. Greenblatt, M.D., Augusta, Ga.

MORPHOLOGY AND RACIAL DISTRIBUTION OF FATAL COCCIDIOIDOMYCOSIS 115
R. W. Huntington Jr., M.D., Bakersfield, Calif.

SYMPTOMATIC HIATUS HERNIA 119
R. F. Hoffman, M.D., Santa Monica, Calif., Kenneth Cruze, M.D., Los Angeles, and F. X. Byron, M.D., Beverly Hills, Calif.

PRURITUS ANI ET VULVAE 124
E. D. Osborne, M.D., and H. L. Stoll, M.D., Buffalo

ADVERSE REACTIONS TO SULFAMETHOXYPYRIDAZINE (KYNEX) 127
H. O. Perry, M.D., and R. K. Winkelmann, M.D., Rochester, Minn.

CLINICAL NOTES

PRESERVATION OF NATURAL LANDMARKS IN UNILATERAL CLEFT LIP 133
D. R. Millard Jr., M.D., Miami, Fla.

AN IMPROVED VAGINAL APPLICATOR 135
J. P. Barnes, M.D., Houston, Texas

DIAGNOSTIC PROBLEM

ERYTHREMIA (POLYCYTHEMIA VERA), RADIATION THERAPY, AND LEUKEMIA 136
D. S. Kushner, M.D., and P. B. Szanto, M.D., Chicago

MEDICINE AT WORK

WHAT IS A NURSING HOME? 143

NOBODY CALLS THIS AN INSTITUTION 146

"VILLAGE" FOR THE AGED 149

EDITORIALS

Smallpox Today 152

REGULAR DEPARTMENTS

Council on Medical Service: How Old is Too Old to Work? 153
Medical News 154
Corrections 161
Examinations and Licensure 162
Government Services: Defense Department. Air Force. Veterans Administration. Public Health Service 163
Deaths 164
Foreign Letters: Austria: Iron Deficiency Anemia. Treatment of Neuralgia. Dissemination in the Course of Eczema. Anemia and Geophagia 168
Brazil: Diagnosis of Syphilis. Operations for Pelvic Cancer. Surgical Treatment of Goiter. Plastic Surgery of the Esophagus. Labor After Previous Cesarean Section 168
France: Coronary Arteriography. Bronchogenic Cancer. Respiratory Allergies in Children. Suppurative Adenitis due to BCG Vaccine 170
India: Dementia Paralytica 170
United Kingdom: The Mind and the Machine. Trichomonal Vaginitis. Recurrent Stys. Physicians' Cathedral Window 171
Miscellany: Report on Conference on Staphylococcic Disease 172
Leisure Corner 175
Correspondence: Cardiac Emergency 176
Medical Literature Abstracts 177
Book Reviews 196
Questions and Answers: Smallpox Vaccination. Bacterial Haptenes. Neutron Capture Therapy. Prophylactic Surgery in Cancer. Muscle Tightness and Stress. Animal Jaundice and Infectivity of Man. Color of Freshly Drawn Blood. Salt Intake During Pregnancy. Nutrition for a Patient with Twenty Centimeters of Jejunum. Pregnancy and Tuberculosis. Celery Contact Dermatitis. Blood Pressure Determination and Valvular Disease of the Heart. Celiac Disease Syndrome 198
Index to Vol. 168 ..... Follows Page 202

WASHINGTON NEWS

Medical Research Spending Holding Up. Scientific Advisory Council Forming. Joint Blood Council Cites Component Wastage ..... Adv. Page 29
Meetings ..... Adv. Page 32
Magazine-Television Report ..... Adv. Page 46
National Organizations of Medical Interest ..... Adv. Page 48
From Other Pages ..... Adv. Page 64
Suggestions for Contributors ..... Adv. Page 243
Tonics and Sedatives ..... Adv. Page 244
Books Received ..... Adv. Page 270
The Bright Side ..... Adv. Page 280
Index to Advertisers ..... Adv. Page 306

Volume 169, No. 2 Published Weekly at 535 North Dearborn Street, Chicago 10, Illinois. Subscription, $15. Single Copy, 45 cents.

De Palma—**Management of Fractures & Dislocations**—New!

Here is a lavishly illustrated and meticulously produced 2-volume atlas. It depicts in exquisite detail each step in the management of virtually every conceivable skeletal injury. Concise text accompanying each procedure tells you exactly how Dr. Anthony De Palma manages the case in his own practice.

See* SAUNDERS *Advertisement on next 2 pages

Just Ready! In Two Volumes—An Atlas

De Palma—MANAGEMENT

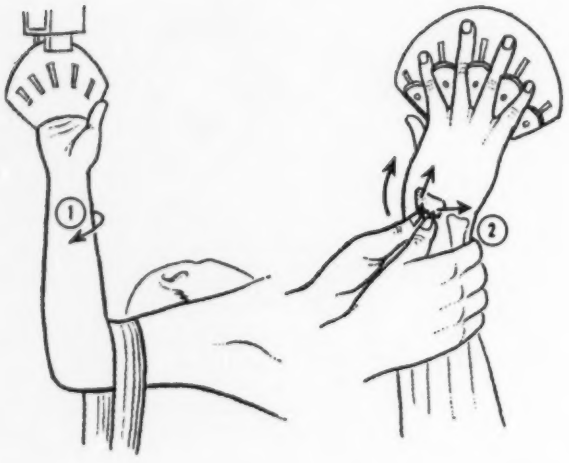
1,927 step-by-step illustrations show every move to be made

- **In Reduction**
- **In Immobilization**
- **In Post-Reduction Management**

CONTENTS

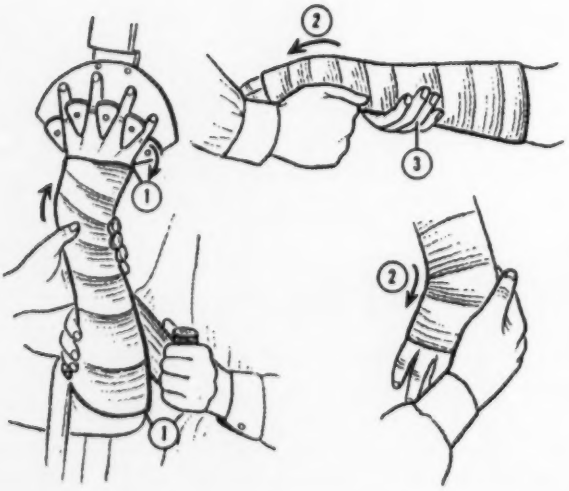
VOLUME I

Part One—PRINCIPLES..... 3
Part Two—PROCEDURES.....130
Fractures and Dislocations of the Spine.....130
Fractures and Dislocations of the Pelvis.....187
Injuries of the Thoracic Cage.....200
Fractures and Dislocations of the Shoulder Girdle 218
Dislocations and Fracture-Dislocations of the Glenohumeral Joint.....246
Fractures of the Humerus.....284
Fractures and Dislocations in Elbow Region...314
Fractures of Bones of the Forearm.....410



VOLUME II

Part Two—PROCEDURES (Continued).....472
Fractures and Dislocations in Wrist Region....472
Fractures and Dislocations of the Hand.....528
Fractures and Dislocations of the Hip.....574
Fractures of the Femur.....654
Injuries of Soft Tissues and Bony Elements of the Knee Joint.....706
Fractures of the Tibia and Fibula.....798
Injuries of the Ankle Joint: Sprains, Fractures, Dislocations 824
Fractures and Fracture-Dislocations of Bones of the Foot.....902



The uncluttered drawings at the left exemplify how the many illustrations quickly clarify procedures . . . This particular series shows the preferred method of reducing an extension fracture of the lower end of the radius by traction and manipulation. Text description in large type appears opposite the drawings. Each procedural step is consecutively numbered—from initial application of the Weinberg finger traction apparatus to finishing touches on the plaster cast.

THE JOURNAL of the American Medical Association is published weekly by the American Medical Association. Subscription price, $15.00 a year, 45c a copy. Canadian $17.00. Foreign $21.50. Accepted for entry as second class mail at the Postoffice at Dayton, Ohio under the act of March 3, 1879. Address all communications to American Medical Association, 535 N. Dearborn St., Chicago 10, Illinois

Designed for Practical Office Use ● A Superb Visual Guide for the General Practitioner, General Surgeon, Surgical Resident and Orthopedic Specialist

OF FRACTURES & DISLOCATIONS

This new and simplified atlas describes and pictures management of 237 differentiated conditions relating to skeletal injuries, dislocations and fractures. Trauma in every area of the skeletal system is considered—from dislocation of the scapula to fracture of the great toe.

For each injury you'll find brief, pertinent information on peculiarities of the lesion, radiographic appearance, associated pathology, prognosis and complications. Dr. De Palma then shows you, visually, exactly how he manages a particular case in his own practice—the method he has found most successful over the years.

Each of the nearly 2000 illustrations is based on a photograph of an actual case treated by the author. His every motion in handling the case is faithfully reproduced in the drawings. The reader virtually stands beside the author as he proceeds through the successive steps of reduction, fixation, splinting, bandaging, etc. Cautions, safeguards, possible complications, and indications for special treatment are specifically pointed out.

Careful attention is given to position of patient, position of physician, direction of traction, difference in treatment between old and new dislocations. Each entity is treated in such a manner that no reference need be made to other portions of the book for full information. A complete index for both volumes is included in each volume.

You'll find useful new concepts in treatment of fractures of the distal end of the radius, in fractures of the hip joint, and in intramedullary nailing. A solidly useful introductory section (116 pages) supplies vital help on Principles of Management. This is background information of wide general application covering: Types and causes of fractures—Rate of union—Complications of fractures—Clinical and radiographic features—Immobilization—Management of open fractures—Restoration of normal function after fractures—Birth fractures—Etc.

Any physician who is ever called upon to reduce a fracture, could scarcely engage a more helpful aid than this explicit new work from Dr. De Palma.

By ANTHONY F. DE PALMA, M.D., James Edwards Professor of Orthopedic Surgery, Jefferson Medical College. Illustrated by BARBARA B. FINNESON and WILLIAM A. OSBURN. Two volumes totalling 986 pages, 9½" x 12¼", with 1927 illustrations. About $35.00. *New!—Ready January.*

SAMPLE CHAPTER SHOWING TYPICAL DETAILED COVERAGE

FRACTURES AND DISLOCATIONS OF THE HIP

Traumatic Posterior Dislocation of the Hip Joint.....574
Traumatic Anterior Dislocation of the Hip Joint.....578
Complications of Dislocations of the Hip Joint.....582
Old Unreduced Dislocations of the Hip Joint.....584
Posterior Dislocation of the Hip Joint with Fracture of the Rim of the Acetabulum.....588
Posterior Dislocation of the Hip Joint with Fracture of the Femoral Head.....591
Central Fracture-Dislocations of the Hip Joint.....594
Dislocation of the Hip Joint with Fractures of the Shaft of the Femur and Tibia and Fibula.....598
Slipped Upper Femoral Epiphysis (Epiphyseal Coxa Vara).....601
Acute, Severe Displacement of the Upper Femoral Epiphysis.....608
Malunited Slipped Upper Femoral Epiphysis.....612
Fractures of the Greater Trochanter.....615
Fractures of the Lesser Trochanter.....617
Fractures of the Neck of the Femur.....619
Fractures of the Neck of the Femur in Children.....633
Complications of Fractures of the Neck of the Femur..639
Trochanteric Fractures.....645
Trochanteric Fractures in Children.....651

Order with Handy Coupon Below

1-10-58

W. B. SAUNDERS COMPANY
West Washington Square, Philadelphia 5

Please send and charge my account: ☐ Easy Pay Plan $5.00 Per Mo.

De Palma—FRACTURES & DISLOCATIONS
Two Volumes—About $35.00

Name.....

Address.....

just published . . .

NEW AND NONOFFICIAL DRUGS 1959

This is the recognized authority published annually under the direction of the Council on Drugs of the American Medical Association. Provides fast, accurate information on the composition, indications and contraindications of all new drugs—official and nonofficial—evaluated on the basis of available scientific data and reports of investigations.

Assures Fast, Accurate Prescription and Identification

All drugs are completely identified and described in monographs giving—

- **chemical or biologic identity, including pertinent properties**
- **actions and uses, including side effects, toxicity and precautions**
- **dosage, including routes of administration**
- **available preparations, including sizes and strengths**
- **applicable commercial names**

All listings are arranged alphabetically according to their nonproprietary titles and grouped under chapters according to pharmacological action or clinical use. 41 new monographs have been added since the 1958 edition.

687 Pages **Fully Cross-Indexed** **$3.35**

BACTERIAL AND MYCOTIC INFECTIONS OF MAN

Edited by René J. Dubos, Ph.D., The Rockefeller Institute. With 36 Contributors

This new edition will do much to clarify our present position with respect to bacterial and mycotic infections. Extensively revised, rewritten and augmented, it reflects the changing concepts of the nature of microbial diseases. Two entirely new chapters are: The Evolution and Ecology of Microbial Diseases (Dubos), and Chemotherapy of Microbial Diseases (McDermott).

820 Pages **116 Figures** **NEW 3rd Edition, 1958** **$8.50**

VIRAL AND RICKETTSIAL INFECTIONS OF MAN

Now Available . . .

Edited by Thomas M. Rivers, M.D., Vice President—Medical Affairs, The National Foundation; and Frank L. Horsfall, Jr., M.D., Vice President for Clinical Studies and Physician-in-Chief to the Hospital, The Rockefeller Institute. With 42 Contributors.

The remarkable increase in knowledge about viral and rickettsial infections has necessitated complete rewriting rather than mere revision of the 1952 Edition. This new 3rd Edition is an entirely new book with 7 more chapters and 14 new contributors. The chapter on the control of poliomyelitis is by Dr. Jonas Salk.

948 Pages **134 Figures** **NEW 3rd Edition, 1959** **$8.50**

J. B. LIPPINCOTT COMPANY

East Washington Square, Philadelphia 5, Pa. In Canada: 4865 Western Avenue, Montreal 6, P.Q.

Please enter my order and send me:

☐ NEW AND NONOFFICIAL DRUGS 1959 ..... $3.35
(This item not returnable)

☐ BACTERIAL AND MYCOTIC INFECTIONS OF MAN $8.50

☐ VIRAL AND RICKETTSIAL INFECTIONS OF MAN $8.50

NAME ..... ☐ Charge

ADDRESS ..... ☐ Payment Enclosed

CITY ..... ZONE ..... STATE ..... ☐ Convenient Monthly Payments

JAMA-1-10-59

A Lea & Febiger Best Seller From Day of Publication!

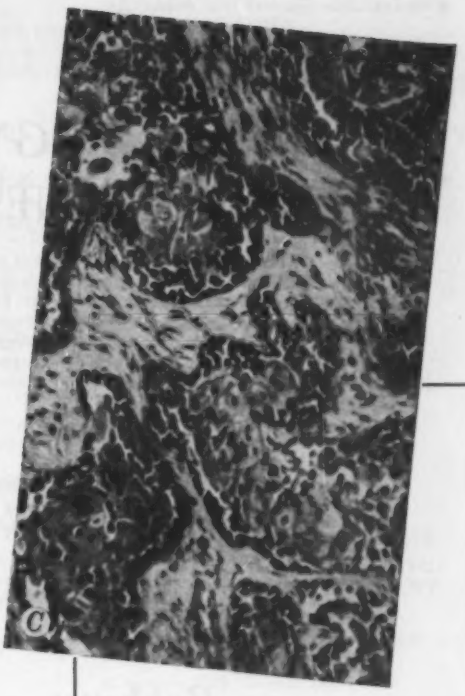
JAFFE—TUMORS and TUMOROUS CONDITIONS of the BONES & JOINTS

By HENRY L. JAFFE, M.D., Director of Laboratories and Pathologist, Hospital for Joint Diseases, New York City; Consultant, Armed Forces Institute of Pathology, Washington, D. C. 629 pages, 7" x 10". 701 illustrations on 194 figures. New. $18.50.

New Book!

The immediate acceptance of Dr. Jaffe's new book indicates clearly that this practical presentation fills completely the need for an authoritative work on tumors and tumorous conditions of the bones and joints. Individual primary tumors, tumors metastatic to the skeleton, tumors developing in bones at sites of damage from noxious agents, and tumors invading bone from overlying soft parts are considered fully.

All conditions are discussed in regard to clinical features, roentgenographic aspects and pathologic manifestations, both gross and microscopic. The text is richly illustrated with full-page plates, each with amply detailed legends. General surgeons, orthopedic surgeons, radiologists, pathologists and others in related fields are already finding dependable help and guidance in this outstanding work. "Differential diagnosis is stressed and the broad outlines of treatment are indicated."—*Therapeutic Notes*.



ONE OF 701 ILLUSTRATIONS

Photomicrograph (x 125) showing striking squamous transformation of the tumor cells from an adamantinoma of a tibia. Patient was 43 year old male who complained of tender, painful swelling over the midportion of the right tibia for one year. (One of a series.)

Also New:

Pollack—Treatment of Breast Tumors

By ROBERT S. POLLACK, M.D., F.A.C.S., Clinical Instructor in Surgery, Stanford University School of Medicine; AND CONTRIBUTORS. 147 pages, 7" x 10". 47 plates and 16 figures. 5 tables. New. $6.00.

This new book presents a complete classification of benign and malignant breast tumors, with clinically approved guidance on all phases of diagnosis and treatment. Management of primary and secondary complicating factors are explained fully. Surgical technics are illustrated clearly with atlas-type drawings.

Discussions are included on chronic cystic mastitis, papillomas of the duct, gynecomastia, spontaneous abscesses and draining sinuses, choice of operation for breast cancer, surgical techniques, postoperative care and complications, the opposite breast, extended radical mastectomy, radiotherapy, etc.

LEA & FEBIGER WASHINGTON SQUARE, PHILADELPHIA 6, PA.

Canadian Agent: The Macmillan Co. of Canada, Ltd., 70 Bond St., Toronto.

Please enter my order and send the books indicated below: (We pay postage if remittance in full accompanies order)

☐ Check enclosed. ☐ Bill me at 30 days. ☐ Charge under your partial payment plan.

☐ Jaffe—Tumors and Tumorous Conditions of the Bones and Joints.....$18.50

☐ Pollack—Treatment of Breast Tumors..... 6.00

Dr. (please print).....Address.....

City.....Zone.....State.....

JI.A.M.A. 1-10-59

A thorough investigation of the subject . . .

Greene:
PHYSIOLOGY OF SPINAL ANESTHESIA

This monograph has been written to supply objective information about one aspect of spinal anesthesia—its physiological effects. The benefits of spinal anesthesia cannot be fully realized unless its physiological effects and limitations are understood and appreciated. Such an examination provides an unequalled opportunity for the study of both normal and pathologic human physiology. In this book Greene reviews and evaluates all reports which appear in the literature dealing with the physiological response to spinal anesthesia or to surgery being performed under spinal anesthesia.

By NICHOLAS M. GREENE, *M.A., M.D., Professor of Anesthesiology and Lecturer in Pharmacology, Yale University School of Medicine; Director of Anesthesia, Grace-New Haven Community Hospital*

November, 1958 • 215 pp., 7 figs. • **$6.00**

A unified discussion incorporating recent studies . . .

Robbins:
CYCLOPROPANE ANESTHESIA

New second edition! Since the first edition eighteen years ago, the results of many studies have been reported which help to explain certain of the clinical questions to which there were no satisfactory answers available earlier. Also many studies in the laboratory and in the clinic have been made in an attempt to explain, prevent, or correct the various cardiac abnormalities that may occur during anesthesia with cyclopropane. This new edition presents to the student a unified discussion of the subject based on a painstaking study of the literature and on the author's personal experience.

By BENJAMIN HOWARD ROBBINS, *B.A., M.S., M.D., Professor of Anesthesiology and Associate Professor of Pharmacology, Vanderbilt University School of Medicine; Anesthesiologist-in-Chief, Vanderbilt University Hospital*

October, 1958 • 311 pp., 71 figs. • **$9.00**

Publishers of Medical and Scientific Books and Periodicals

SANS TACHE

WILLIAMS & WILKINS COMPANY
BALTIMORE 2, MD.

SHOP BY MAIL

THE WILLIAMS AND WILKINS COMPANY
Baltimore 2, Md.

Please send the following on approval:

_____

_____

Name_____
(Please print)

Address_____

City_____ Zone_____ State_____

☐ Payment enclosed. ☐ Bill me.

Shopping by mail is an easy, time-saving way to select books for your personal library.

JAMA-1-10-59

Every physician—no matter how diverse his practice—usually has some favorite field of interest.... and needs authoritative specialized knowledge to put that special interest to practical use.

THESE 20 BOOKS

include some of the newest and most authoritative publications available in special subjects, and have been designed to help you keep abreast of the most recent medical advances as they apply to your daily practice. You may order them "on approval" if you wish, to examine how they fit in with your own special field of interest.

1. LEUKEMIA
By William Dameshek, M.D., and Frederick Gunz, M.D., Ph.D.
Published December 1958, 432 pages, 144 illustrations, $15.75

2. CARDIOVASCULAR DISEASES, Third Revised Edition
By David Scherf, M.D., F.A.C.P. and LINN J. BOYD, M.D., F.A.C.P.
Published 1958, 840 pages, 119 illustrations, $17.75

3. GENERAL TECHNIQUES OF HYPNOTISM
By Andre M. Weitzenhoffer, Ph.D.
476 pages, 43 illustrations, $11.50

4. LIPIDOSES,
Third Revised and Enlarged Edition
By Siegfried J. Thannhauser, M.D., Ph.D.
616 pages, profusely illustrated, $19.75

5. CEREBRAL VASCULAR DISEASES—
Transactions of the Second Conference, held under the auspices of the American Heart Association.
Irving S. Wright, M.D., Chairman, Clark H. Millikan, M.D., Editor
232 pages, $4.00

6. MYASTHENIA GRAVIS
By Kermit E. Osserman, M.D., F.A.C.P.
296 pages, 58 illustrations, $10.00

7. PULMONARY CIRCULATION
Edited by Drs. Wright Adams & Ilza Veith
Published December 1958. 368 pages, 127 illustrations, $4.50

8. DIAGNOSTIC LABORATORY HEMATOLOGY,
Second Revised and Enlarged Edition
By George E. Cartwright, M.D.
262 pages, 33 illustrations, $6.75

9. ALCOHOLISM
By Arnold Z. Pfeffer, M.D.
Published 1958, 110 pages, $4.50

10. THE MEDICAL MANAGEMENT OF CANCER
By Henry D. Diamond, M.D.
184 pages, 40 illustrations, $6.75

11. PROGRESS IN ARTHRITIS
Edited By John H. Talbott, M.D. and L. Maxwell Lockie, M.D.
464 pages, 162 illustrations, $12.50

12. ADVANCES IN ELECTROCARDIOGRAPHY
Edited by Charles E. Kossmann, M.D.
288 pages, 135 illustrations, $9.75

13. HEREDITY OF THE BLOOD GROUPS
By Alexander S. Wiener, M.D., F.A.C.P., and Irving B. Wexler, M.D., F.A.C.P.
160 pages, illustrated, $6.00

14. TOTAL SURGICAL MANAGEMENT
By James D. Hardy, M.D., F.A.C.S.
To appear this month. About $7.50

15. BONE DISEASES IN MEDICAL PRACTICE
By I. Snapper, M.D.
288 pages, 149 illustrations, $15.00

16. BORDERLANDS OF THE NORMAL AND EARLY PATHOLOGIC IN SKELETAL ROENTGENOLOGY, Tenth Edition
By Dr. Alban Köhler; English translation by James T. Case, M.D.
739 pages, 1282 illustrations, $26.50

17. MEDICAL HYPNOSIS
By Lewis R. Wolberg, M.D.
Volume I: Principles of Hypnotherapy
460 pages, $6.00
Volume II: Practice of Hypnotherapy
520 pages, $7.00

18. REMINISCENCES AND ADVENTURES IN CIRCULATION RESEARCH
By Carl J. Wiggers, M. D.
Published Jan. 1959. 416 pages, profusely illustrated, $9.75

19. INTRACARDIAC PHENOMENA
In Right and Left Heart Catheterization
By Aldo A. Luisada, M.D. and Chi Kong Liu, M.D.
189 pages, 82 illustrations, $9.50

20. CYTOLOGY OF THE BLOOD AND BLOOD-FORMING ORGANS
By Marcel Bessis, M.D.
672 pages, 427 illustrations, 22 in color, $23.50

GRUNE & STRATTON, INC.
381 Fourth Avenue,
New York 16, N.Y.

NAME..... ☐ Check enclosed

ADDRESS..... ☐ Charge my account

CITY.....ZONE.....STATE..... ☐ Send on approval

Send the following books:.....

• *Important New Books from . . .*

Paul B. Hoeber, Inc.

. . . for your practice

BAYLEY'S Biophysical Principles of Electrocardiography

New and fundamental. An eminent investigator and teacher explains and illustrates, in careful detail, the basic knowledge essential for understanding the electrocardiographic wave form. Required information from electricity and mathematics is reduced to easily-understood methods. This book will supplement, not duplicate, any texts now on your shelves.

By ROBERT H. BAYLEY, M.D., *University of Oklahoma. 255 pp., profusely illustrated. $8.00*

DeJONG'S Neurologic Examination

Second Edition. This revision of a classic volume offers you a detailed, up-to-the-minute guide to the examination of each part of the nervous system. Provides essential new data in such areas as neuro-ophthalmology, the acoustic nerve, extrapyramidal complex, regulation of cerebrospinal fluid pressure, etc.

By RUSSELL N. DeJONG, M.D., *University of Michigan Medical School. 1096 pp., profusely illustrated. $20.00*

HOLLINSHEAD'S Surgical Anatomy of the Back & Limbs

Detailed—comprehensive. Presenting living, functioning surgical anatomy, this new, lavishly illustrated book offers details available in no other single volume. Every chapter illustrates and describes in detail the variations and abnormalities which may be encountered at the operating table. Every chapter has been checked by a Mayo Clinic surgeon to insure that the focus is constantly on the problems of clinical practice.

By W. HENRY HOLLINSHEAD, Ph.D., *Head of the Section of Anatomy, Mayo Clinic. With 12 Mayo Clinic Consultants. 915 pp., 785 illustrations, many with color. $23.50*

HOMBURGER-FISHMAN'S The Physiopathology of Cancer

2nd Edition. This classic work on the fundamental biochemical and biologic aspects of cancer has been thoroughly revised to incorporate the newest advances in our knowledge of neoplastic disease. Investigators and clinicians will find it even more valuable than before.

By 31 Authors. 2nd Edition Edited by FREDDY HOMBURGER, M.D., *Tufts University School of Medicine. Approx. 1000 pp., illustrated. $33.00*

HURWITZ & DEGENSHEIN'S Milestones in Modern Surgery

New! Here in a unique volume are the classic papers which make possible our present golden age of surgery—from Pare's famous Apologie of 1585 to Merrill, Murray, Harrison and Guild's transplantation of the human kidney in 1956. There are 30 milestones in all, setting forth the enduring concepts underlying clinical practice today.

By ALFRED HURWITZ, M.D., *State Univ. of N.Y. Coll. of Medicine; and* GEORGE A. DEGENSHEIN, M.D., *Maimonides Hospital, N. Y. 538 pp., illustrated. $15.00*

MILCH & MILCH'S Fracture Surgery: A Textbook of Common Fractures

NEW! The clinical consequences and the x-ray recognition of axial malalignments are clearly described in this new kind of fracture guidebook. Designed to provide quick help in emergencies, it gives convenient, authoritative information for accurate diagnosis and definitive treatment. Hundreds of fine X-ray plates graphically illuminate the explicit text descriptions.

By HENRY MILCH, M.D., *Hospital for Joint Diseases, N. Y., and* ROBERT AUSTIN MILCH, M.D., *Peter Bent Brigham Hospital, Boston. 480 pp., 480 illustrations. $17.50*

H|H

• *Use handy coupon opposite to order* ▶

More New Hoeber Books

MILCH'S The Ischium

An aid to differential diagnosis, this well-illustrated book calls attention to the numerous conditions of the ischium which simulate hip joint disease. The complete discussion of the normal and diseased bone will be of great value to the radiologist and the orthopedic surgeon.

By HENRY MILCH, M.D., *Hospital for Joint Diseases, N. Y. 163 pp., 106 illustrations. $10.50*

PACK & ARIEL'S Principles of Cancer Treatment

55 specialists present, out of personal experience, the fundamentals of cancer therapy including the tools available today for proper treatment of tumors of any region. Radiation therapy (including super-voltage x-ray) vascular surgery, treatment of intercurrent metabolic or degenerative diseases, protection in radiotherapy, clinical use of isotopes, chemotherapy, etc. Nowhere else is this clinical information brought together in one place.

By 55 Authors. 668 pp., 505 illustrations, (4 in full color) (Vol. 1 of Treatment of Cancer and Allied Diseases) $22.50

PACK & ARIEL'S Treatment of Tumors of the Nervous System

The only book devoted exclusively to treatment of tumors of the brain, spinal cord and peripheral nerves and tumors metastatic to the nervous system. 30 authorities describe the operations used in their own practice, the use of radiation therapy and procedures for relief of pain by interruption of nerve pathways.

30 Authors. 316 pp., 340 illustrations. (Vol. 2 of Treatment of Cancer and Allied Diseases) $15.00

PASCHKIS, RAKOFF & CANTAROW'S Clinical Endocrinology

2nd Edition. In this revision of a standard text every chapter is updated. It brings you all the latest information, including the new schedules for treatment of Addison's Disease, the diagnosis and treatment of virilizing adrenal hyperplasia and tumors, new knowledge of synthesis of thyroid hormone, new use of the long-acting steroid hormone preparations, etc.

By KARL E. PASCHKIS, M.D., ABRAHAM E. RAKOFF, M.D., *and* ABRAHAM CANTAROW, M.D., *Jefferson Medical College. 940 pp., profuse illustrations. (6 in color) $18.00*

RILEY'S Gynecologic Endocrinology

Foreword by Norman F. Miller, M.D. This new volume brings together the many diverse aspects of endocrinology bearing on the function and dysfunction of the human female reproductive system. Endocrine diagnostic procedures of proven clinical significance are described in such detail as to be of value to technologists, as well as clinicians. A formulary-style listing of endocrine preparations is given separately for quick reference in selecting the most valuable therapeutic agent available.

By GARDNER M. RILEY, Ph.D., *Univ. of Mich. Foreword by Norman F. Miller, M.D. Approx. 300 pp. In Press*

SAPHIR'S Autopsy Diagnosis and Technic

4th Edition. Here is a new revision of a widely popular guide covering every region of the body. It explains in step-by-step detail and vividly clear illustrations exactly how to carry out an autopsy and how to determine the cause of death. Reflected throughout are the great medical advances of recent years. Tables of differential diagnosis, weights of organs, etc., enhance the book's handy reference use. Foreword by Ludvig Hektoen, M.D.

By OTTO SAPHIR, M.D., *Michael R. Reese Hospital and Univ. of Ill. School of Medicine. 570 pp., illustrated. $8.50*

PAUL B. HOEBER, Inc.

Publishers

MEDICAL BOOK DEPARTMENT OF HARPER & BROTHERS

49 East 33rd Street,
New York 16, New York

Please send me the books checked on approval:

☐ BAYLEY $8.00	☐ HURWITZ & DEGENSHEIN $15.00	☐ PACK & ARIEL: Nervous System ..$15.00
☐ DEJONG $20.00	☐ MILCH & MILCH: Fractures $17.50	☐ PASCHKIS, et al. $18.50
☐ HOLLINSHEAD: Back and Limbs....$23.50	☐ MILCH: Ischium $10.50	☐ RILEY ..... In Press
☐ HOMBURGER-FISHMAN $33.00	☐ PACK & ARIEL Principles $22.50	☐ SAPHIR $8.50

☐ My check is enclosed (return privileges) ☐ Bill me

Name.....

Address.....City & State.....

JAMA 1/10/59

3 New Mosby Books of Vital Interest to Every Physician Who Performs Surgery

Just Published!

Stephenson CARDIAC ARREST AND RESUSCITATION

The First Complete Monograph on the Subject

Are you prepared for the moment when you might have to revive a human heart? Few emergencies are remembered as vividly as those of sudden cessation of cardiac output. An adequate knowledge of the subject falls by necessity into the scope of nearly every generalist—surgeon, anesthesiologist and cardiologist. Dr. Hugh Stephenson's CARDIAC ARREST AND RESUSCITATION provides you in one comprehensive volume with all the available data on the subject—including historical and research information. Furthermore it covers many of the practical aspects and gives you valuable information not previously published.

This complete monograph was written to acquaint you with all the facts necessary to help you to successfully resuscitate a human heart and to stimulate thinking and further understanding of the problem. Many of the conclusions presented are based on a six year study of more than 1,700 cases contained in the Cardiac Arrest Registry established by Dr. Stephenson with the cooperation of physicians all over the world. You will find of particular interest the material on Neurosurgical sequelae following cardiac arrest and the detailed account of "elective" cardiac arrest.

By HUGH E. STEPHENSON, JR., B.S., M.D., Professor and Chairman, Department of Surgery, University of Missouri School of Medicine; Chief of Surgical Service, University of Missouri Hospitals. Just Published. 1958, 378 pages, 6¾" x 9¼", 31 illustrations. Price, $12.00.

Soon-to-be-Published! 3rd Edition

Moseley TEXTBOOK OF SURGERY

Copiously Illustrated with 108 Color Plates, 738 Text Illustrations

You will find the new 3rd edition of Moseley's TEXTBOOK OF SURGERY a book that is truly up-to-date—that is well rounded without undue emphasis on the surgery of any one part of the body—and that is copiously illustrated with over 700 text photographs and drawings and well over 100 color plates. Integrating basic principles with clinically tried procedures, this book gives you "reasons why" certain procedures are recommended so that it can help you understand the thinking behind all types of surgery.

Edited by Dr. H. F. Moseley and written by a staff of 40 outstanding surgeons and educators, the 3rd edition of this popular book has been completely revised, expanded and brought up to date to include all the recent advances in surgery. The entire group worked as a closely knit team to produce a book strong in every area. The sections on surgery of the heart, great vessels and lungs have been completely rewritten and an important new chapter on "Pediatric Surgery" adds much to the value of this revision.

Edited by H. F. MOSELEY, M.A., D.M., M.Ch. (Oxon), F.A.C.S., F.R.C.S. (Eng.), Assistant Professor of Surgery, McGill University; Associate Surgeon, Royal Victoria Hospital, Montreal, Canada. To be Published later this month. 3rd edition, 1174 pages, 6⅞" x 10", 738 text illustrations, 108 color plates. About $17.00.

Soon-to-be-Published! 2nd Edition

Ackerman SURGICAL PATHOLOGY

The First Book on the Subject to be Written by a Pathologist and a Surgeon

Numerous books have been written on surgical pathology—most of these by pathologists, some by surgeons. This new 2nd edition of SURGICAL PATHOLOGY is the first book to be written by both—a pathologist in collaboration with a practicing surgeon. Dr. Lauren V. Ackerman, Professor of Surgical Pathology and Pathology and Dr. Harvey R. Butcher, Jr., Associate Professor of Surgery have combined their experience and knowledge to give you a book that is a modern interpretation of today's surgical pathology—a book that translates diagnosis into action.

This edition has been extensively revised and expanded; many new illustrations have been added. Due to the many recent advances in vascular surgery, a compietely new section on this subject has been added as well as new chapters on "Eye Pathology," and "Skin Pathology." Furthermore the chapter on "Bone Pathology" has been extensively enlarged.

By LAUREN V. ACKERMAN, M.D., Professor of Surgical Pathology, Washington University School of Medicine; Surgical Pathologist, Barnes and Affiliated Hospitals, St. Louis, Mo. In Collaboration with: HARVEY R. BUTCHER, JR., M.D.; Contributors; ROBERT W. OGILVIE, M.D.; LORENZ E. ZIMMERMAN, M.D., and THEODORE E. SANDERS, M.D. To be Published next month. 2nd edition, 1065 pages, 6¾" x 9¼", 960 illustrations. Price, about $16.00.

At Your Favorite Bookstore or Order on 10 Day Approval From

C V M

The C. V. Mosby Company

3207 Washington Boulevard • St. Louis 3, Missouri

A CIBA Documentary Report

How clinicians evaluate the safety and effectiveness of RITALIN® as a psychic stimulant

CONDITIONS TREATED	RESULTS	COMMENTS ON SAFETY
Depression accompanying chronic illness and convalescence from short-term illness; mild depression induced by life pressures; over-tranquilization.	"The drug gave a plateau type of stimulation, smooth onset, with no euphoria . . . The effect lasted about four hours, gave the patient a feeling of well-being . . ."	"The side effects of Ritalin are minimal." "The work showed that the drug had no effect on blood pressure, the blood count, urine or blood sugar, did not depress the appetite, and produced no tachycardia."[1]
Lethargy, fatigue and emotional depression secondary to chronic illness in elderly patients; mild depression secondary to short-term illness. (Twenty-three "normal," healthy people also received the drug.)	"For the entire 112 patients 66 per cent showed marked improvements [obvious drug effect and mood improvement] . . ."	"No serious side reactions were noted . . . In no case was it necessary to stop the drug. No evidence of significant effect upon blood pressure or pulse has been found. This is particularly interesting, since these side effects have been common with [certain] other mood elevating drugs . . ."[2]
Drug-induced psychophysiologic depression; physiologic after-effects of certain anesthetics; barbiturate intoxication; moribund states due to systemic infection. (All patients were epileptic, mentally retarded and/or brain damaged.)	"All except two [of 129] patients responded to the initial injection [of parenteral Ritalin] within 1½ to 15 minutes."	"In no instance was there any evidence of untoward effects." ". . . the very poor basic physical condition of our patients in this study, those associated with profound chronic brain damage, accentuates the [relative] safety of parenteral Ritalin . . ."[3]

INDICATIONS FOR RITALIN AS A PSYCHIC STIMULANT: *Oral Ritalin is indicated* for chronic fatigue and depressed and lethargic states such as occur in chronic illness, old age, etc.; to overcome lethargy or depression associated with tranquilizing agents, barbiturates and antihistamines; to improve behavior patterns in psychoneuroses and in certain senile and/or psychotic patients. *Parenteral Ritalin is indicated* for hastening recovery from postoperative barbiturate anesthesia; for psychiatric conditions associated with depressions; for stimulation of freer verbalization during psychotherapeutic interviews and for initiating therapy in selected psychiatric patients; for cases of acute overdosage of barbiturates, tranquilizers, anticonvulsants or other sedative drugs.

DOSAGE: *Oral:* Dosage will depend upon indication and individual response. Many patients respond to 10 mg. b.i.d. or t.i.d. Others will require 20-mg. doses. In a few cases, 5-mg. doses will be adequate. If inability to sleep is encountered, last dose should be given before 6 p.m. *Parenteral:* 10 to 30 mg., intravenously or intramuscularly. RITALIN® hydrochloride (methylphenidate hydrochloride CIBA)

REFERENCES: 1. Natenshon, A. L.: Dis. Nerv. System *17*:392 (Dec.) 1956. 2. Landman, M. E., Preisig, R., and Perlman, M.: J. M. Soc. New Jersey *55*:55 (Feb.) 1958. 3. Carter, C. H., and Maley, M. C.: Dis. Nerv. System *18*:146 (April) 1957.

CIBA
SUMMIT, N. J.

effective pediatric decongestant

preferred dosage strength—0.25%

new, convenient 2-way dispenser

assures greater patient acceptance

all the advantages of time-tested phenylephrine HCl—preferred pediatric dosage strength—0.25%

helps restore physiologic nasal pH and tonicity—notably free from undesirable side effects

exclusive 2-way dispenser permits both drop and spray dosage

Supplied: 13½ cc. plastic spray bottle with plastic calibrated dropper

Johnson-Johnson

in acute dermatoses

as well as subacute and chronic skin diseases

"prompt remissions"[1]

"...when the tar-steroid cream TARCORTIN was prescribed for patients presenting very acute episodes of atopic dermatitis, contact dermatitis, psoriasis, chronic infectious eczematoid dermatitis, and other eczematous dermatoses...we were able to achieve prompt remissions..."[1]

1. Welsh, A. L., and Ede, M.: J.A.M.A. 165:174, 1956.

Additional Clinical Publications on Tarcortin:

Clyman, B. G.: Postgrad. Med. 21:309, 1957 • Bleiberg, J.: J. M. Soc. New Jersey 53:37, 1956 • Abrams, B. P., and Shaw, C.: Clin. Med. 3:639, 1956 • Bleiberg, J.: Am. Practitioner 8:1404, 1957

NEW TARCORTIN LOTION

TARCORTIN®

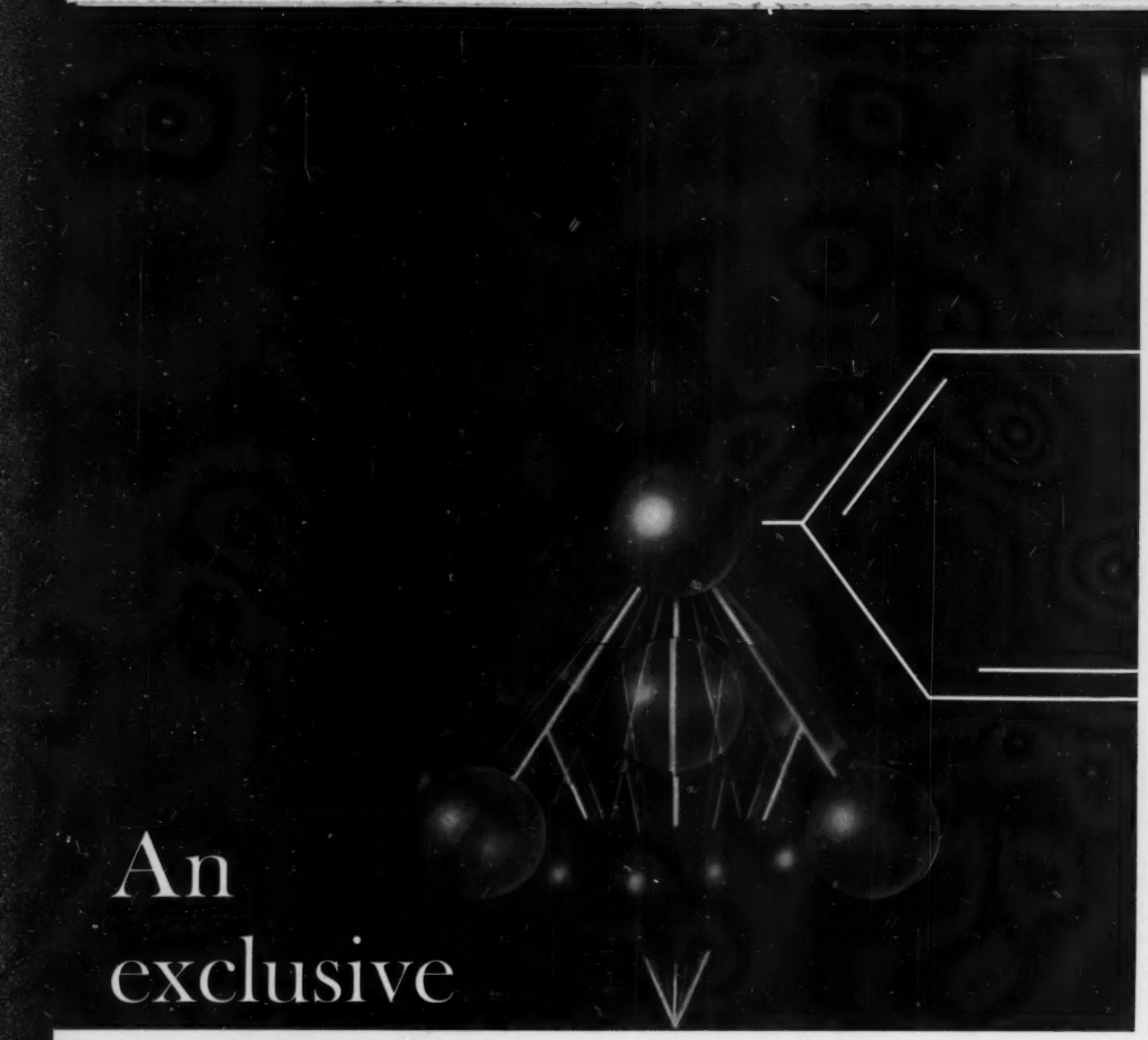
Cream Hydrocortisone 0.5% and Special Coal Tar Extract 5% (TARBONISal) in a greaseless, stainless vanishing cream base. In tubes of 7 gm. and 1 oz.

ALSO AVAILABLE:
FOR DRY SCALY ECZEMAS, AND WHEN INFECTION IS PRESENT OR ANTICIPATED

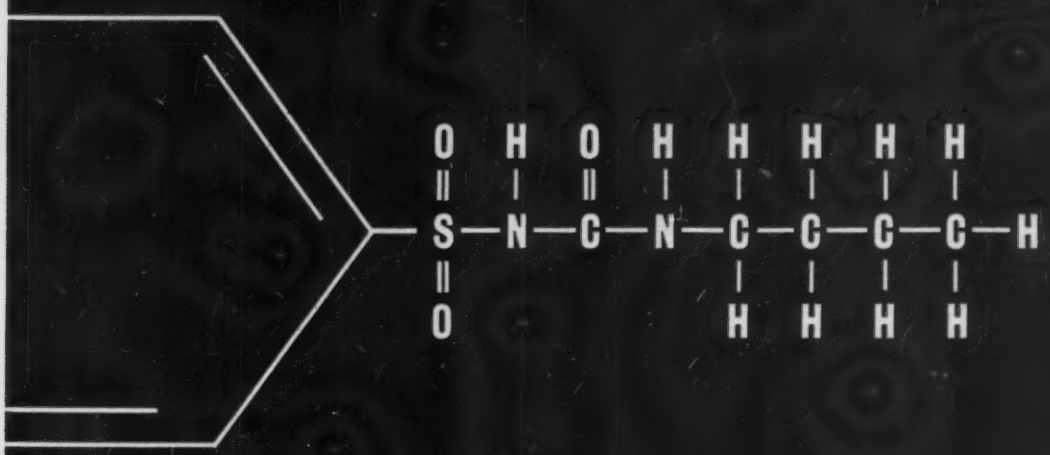
NEO-TARCORTIN®

Ointment Hydrocortisone 0.5%, Neomycin (as Sulphate) 0.35% and Special Coal Tar Extract 5%. In tubes of 7 gm. and 1 oz.

REED & CARNRICK
Jersey City 6, New Jersey



An exclusive methyl "governor" prevents hypoglycemia... makes Orinase a true euglycemic agent



The significant difference between Orinase and all other anti-diabetes agents is that there is virtually no danger of hypoglycemic reactions as a result of Orinase therapy, regardless of dosage.

A logical explanation is that Orinase's exclusive methyl group in the para position serves as a "governor" to prevent hypoglycemia by facilitating the rapid inactivation of the molecule in the body. There is no *cumulative* effect.

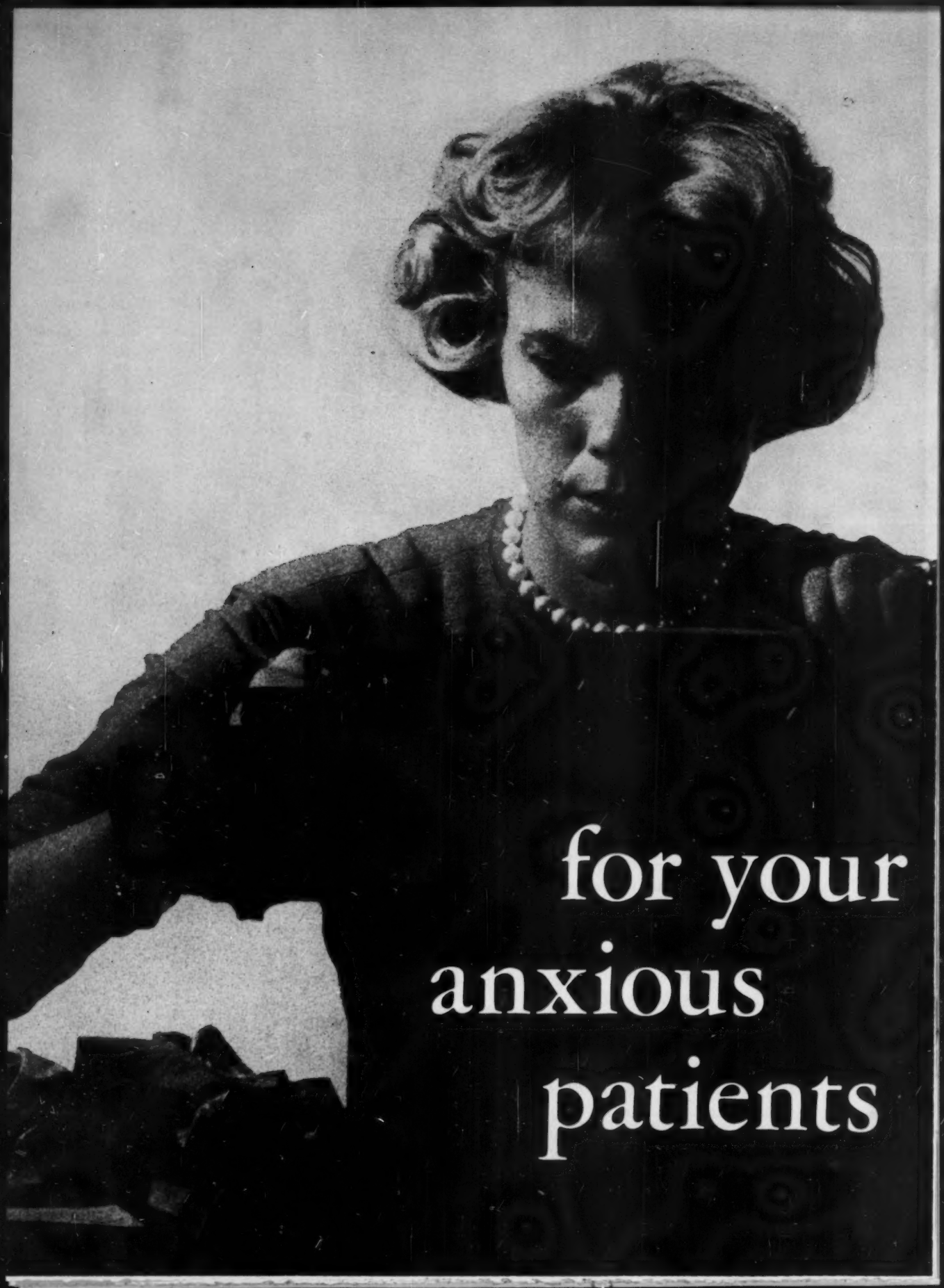
The result is that Orinase lowers the blood sugar in responsive diabetics *to* normal levels, but almost never *beyond* that point. In other words, Orinase is a true *eu*glycemic agent, in contradistinction to the others, which actually *are* hypoglycemic agents.

This unique margin of safety is especially important in the patient requiring insulin, because Orinase, superimposed on his insulin dosage, constitutes no added danger of hypoglycemia. This makes it feasible for you to smooth out the "peaks and valleys" of erratic blood sugar levels...to "stabilize" a surprising percentage of labile diabetics.

*TRADEMARK. REG. U. S. PAT. OFF.—TOLBUTAMIDE, UPJOHN

The Upjohn Company
Kalamazoo, Michigan

Upjohn


for your
anxious
patients

offers four beneficial effects

1. relieves anxiety, tension and related depression
2. exerts a unique alerting effect in many patients
3. dispels preoccupation with emotionally induced symptoms such as headache, g.i. disturbances and non-specific musculoskeletal pain
4. normalizes sleeping and eating habits

WORKING PATIENTS appreciate Compazine's remarkable freedom from drowsiness and the convenient daylong calming effect of a single 'Compazine' Spansule† capsule, taken on arising. Also available: Tablets, Ampuls, Multiple dose vials, Syrup and Suppositories.

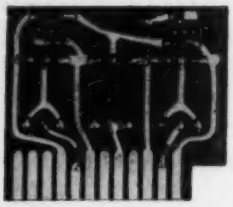
SKF SMITH KLINE & FRENCH LABORATORIES

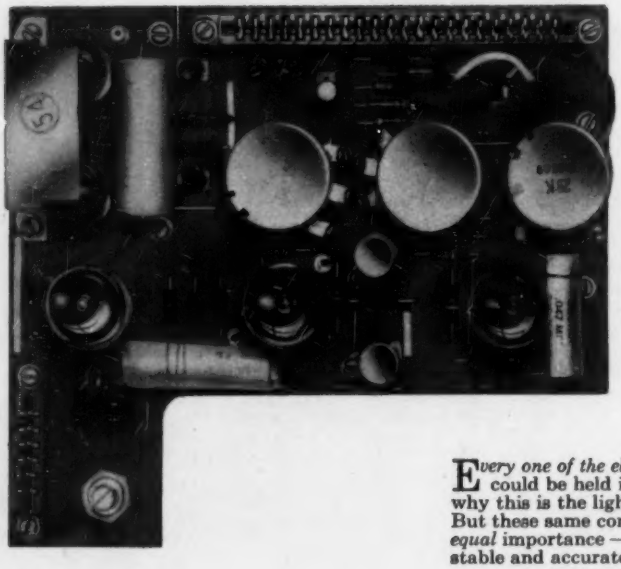
*T.M. Reg. U.S. Pat. Off. for prochlorperazine, S.K.F.
†T.M. Reg. U.S. Pat. Off. for sustained release capsules, S.K.F.

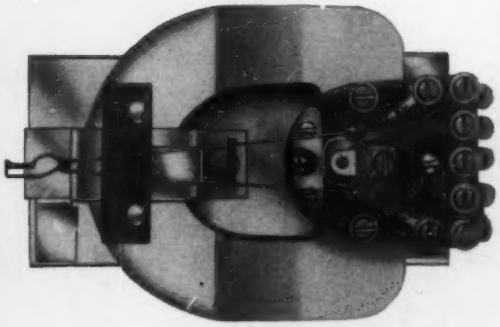
Compazine*

remarkable for its freedom from drowsiness and depressing effect

They've put cardiography on the road . . . *with accuracy*







Every one of the electronic components used in a Visette electrocardiograph could be held in your two hands — dramatically demonstrating why this is the lightest, most compact ECG in existence today. But these same components would also prove something else — of *equal* importance — about the Visette: why it can "*take it*", and *remain* stable and accurate, after hundreds of trips to and from your office.

As you looked at these examples of completely modern electronics used in the Visette, you would see numerous *transistors* — rugged, miniature, solid devices which do many of the jobs vacuum tubes do, but with the advantages of much greater durability, preferable electrical characteristics in certain applications, and an extremely long operating life. You'd also see wiring which was *printed* on thin, tough phenolic panels — in place of hundreds of separate pieces of wire; such connections, of course, can't shake loose under constant jarring — and they also make possible "building block" circuitry in the Visette with separate, easily accessible plug-in panels.

And similar advantages in greater ruggedness, longer life, better performance or smaller size would be found in other Visette elements. *Each one was chosen for the contribution it could make in achieving a smaller, lighter, more rugged ECG — without sacrificing accuracy.* Together, they become part of an electrocardiograph offering unequalled operating convenience and portability. More than 3000 doctors today know this from their own experience — in using a Visette in their own practices.

Descriptive literature, "Questions and Answers" on the Visette in handy folder form, or details of the Sanborn 15-day Test-and-Return Plan available on request. Address "Inquiry Director."

Model 300 Visette electrocardiograph, $625 delivered, continental U. S. A.

SANBORN COMPANY

MEDICAL DIVISION 175 Wyman Street, Waltham 54, Massachusetts

specific for situational stress

PHENERGAN aids in carrying your patients through difficult periods of stress. It creates a state of quiescence without depressing vital functions. Because of its many actions and uses, PHENERGAN is used extensively in obstetrics, surgery, and in wide-ranging areas of medicine.

versatile in action

Psychic sedative
Antiemetic
Antihistaminic
Analgesic and narcotic potentiator

indications:

Nausea and vomiting
Motion sickness
Surgical sedation
Obstetrical sedation
Oral surgery and dental procedures
Allergic reactions

PHENERGAN®
HYDROCHLORIDE
Promethazine Hydrochloride, Wyeth

Wyeth
Philadelphia 1, Pa.

INJECTION • TABLETS • SYRUP • SUPPOSITORIES

Comprehensive literature supplied on request

Motion sickness
Nausea and vomiting

Surgical and
obstetrical sedation

Allergic reactions

Medicine's priceless past is but prologue to its brilliant present and future. To help provide an increasingly better public understanding and awareness of Medicine's proud traditions, Parke-Davis will launch a new institutional advertising campaign this month. GREAT MOMENTS IN MEDICINE will depict historically accurate scenes of advancements in Medicine through the centuries. This new, colorful, and informative Parke-Davis campaign will appear regularly during 1959 in LIFE, SATURDAY EVENING POST, TIME, READER'S DIGEST, and TODAY'S HEALTH. As a preview to the medical profession, the first advertisement in this series is reprinted on the opposite page. Soon, millions of people throughout the United States—and the world—will also see it.

MEDICINE IN ANCIENT EGYPT—one of a series of oil paintings, "A History of Medicine in Pictures," commissioned by Parke-Davis.

Great Moments in Medicine

Clothed in spotless linens and wearing a wig, as became the dignity of his status, an Egyptian physician of 1500 B.C. administers to a patient with symptoms of lockjaw. Although Egyptian doctors dominated medicine in the ancient world for thousands of years, this highly-respected practitioner could rely only on personal skill, judgment, and experience to combat such dreaded killers as tetanus.

Today, 3500 years later, due to advances in pharmaceutical research, tetanus is no longer a source of fear. Your modern physician employs safe and effective immunizing agents to protect you and your family from tetanus, polio, and many other infections that were killers of defenseless persons in former times.

Parke-Davis scientists are proud of their place in the living history of modern medicine, helping to provide the people of the world with the better health and longer life that come with better medicines.

COPYRIGHT 1951—PARKE, DAVIS & COMPANY, DETROIT 32, MICHIGAN

PARKE-DAVIS

. . . Pioneers in better medicines

"Its relative simplicity makes it very acceptable to the patient."*

Delfen

ORTHO'S MOST SPERMICIDAL CONTRACEPTIVE

Ortho

*Stone, D.; Clark, V.; Jennings, M.; Pollak, V.; Orton, N.; Wall, L.; and Tyler, C. T.: West. J. Surg. 64:152, 1956.

Composition: Nonylphenoxypolyethoxyethanol 5% in an oil-in-water emulsion at pH 4.5.

ANNOUNCING

a "wide range" antihypertensive

MILD MODERATE SEVERE

DIUPRES

DIURIL® WITH RESERPINE

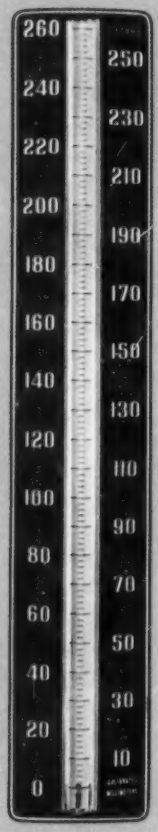
effective therapy for **most** hypertensives

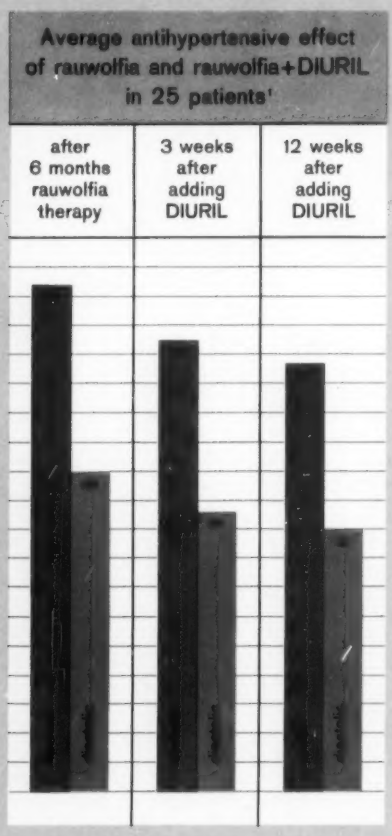
a logical alliance of two antihypertensives
you know and trust provides

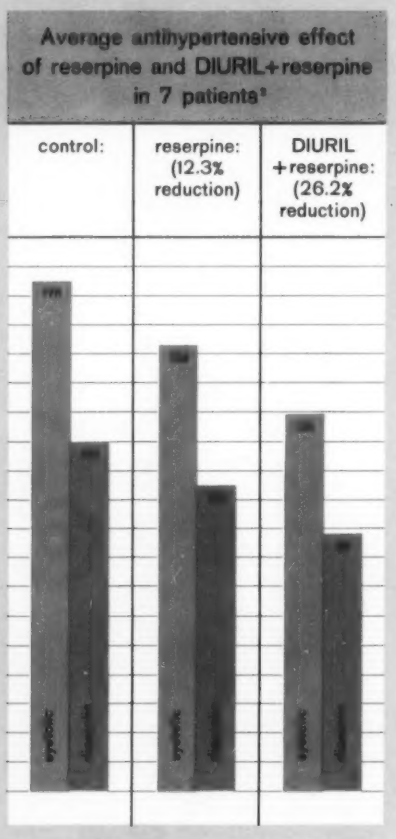
increased effectiveness, decreased side effects

potentiated effect

DIUPRES produces an effect greater than either DIURIL or reserpine alone. It is effective in many patients who respond inadequately or not at all to either DIURIL or reserpine.




Average antihypertensive effect of rauwolfia and rauwolfia+DIURIL in 25 patients[1]
after 6 months rauwolfia therapy
3 weeks after adding DIURIL
12 weeks after adding DIURIL


Average antihypertensive effect of reserpine and DIURIL+reserpine in 7 patients[2]
control:
reserpine: (12.3% reduction)
DIURIL +reserpine: (26.2% reduction)

DIUPRES

DIURIL® WITH RESERPINE

effective therapy for most patients

DIUPRES by itself usually provides effective therapy for a majority of patients with mild or moderate hypertension, and even for some patients with severe hypertension.

provides basic therapy

Should other drugs need to be added to DIUPRES, they can be given in much lower than usual dosage so that their side effects are often strikingly reduced.

rapid onset of effect

The antihypertensive action of DIUPRES is rapidly evident. (Considerable time may elapse before the antihypertensive effect of reserpine alone is observed.)

fewer and less severe side effects

DIUPRES may be expected to cause fewer and less severe side effects. (Since DIURIL and reserpine potentiate each other, the required dosage of each is usually less when given together as DIUPRES than when given alone. Such reduction in dosage makes side effects less likely to occur.)

often obviates weight gain

DIUPRES minimizes the problem of weight gain seen with reserpine (reserpine alone has been reported to produce weight gain in 50 per cent of patients).[1,4]

virtually eliminates fluid retention

DIUPRES is not likely to cause either clinical or subclinical retention of sodium and water. (Hypotensive drugs, particularly rauwolfia[5] and hydralazine,[6] may cause fluid retention. Even when such retention is subclinical, their antihypertensive effectiveness is diminished.[6])

diet more palatable

With DIUPRES, there is less need for rigid restriction of dietary salt, which patients find so burdensome.

> *"It may well be that the drug* [DIURIL] *produces the benefits of a markedly restricted low sodium diet but without its hardships."*[3]

subjective and objective improvement

DIUPRES allays anxiety and tension, thus reducing the emotional component of hypertension. Organic changes of hypertension may be arrested and reversed. Headache, dizziness, palpitations and tachycardia are usually promptly relieved by DIUPRES. When the *anginal syndrome* accompanies hypertension, the administration of DIUPRES may also cause diminution or even disappearance of this syndrome concurrent with control of the hypertension.

convenient, controlled dosage

Instead of two separate prescriptions, you write one prescription... the patient takes one tablet, rather than two different tablets... and the dosage schedule is easier for the patient to remember and follow.

> *"patients have fewer lapses and make fewer mistakes in dosage, the simpler the regimen can be made. Therefore I do not hesitate to use more than one medicament combined in one tablet, provided this gives approximately the correct dosage of each."*[6]

economical

DIUPRES will cost the patient less than if he were given two separate prescriptions for its components.

Indications:
DIUPRES is indicated in hypertension of all degrees of severity. It can be used in the following ways:

- as total therapy
- as primary therapy, adding other drugs if necessary
- as replacement or adjunctive therapy in patients now treated with other agents

Precautions:
The precautions normally observed with DIURIL or reserpine apply to DIUPRES. Additional information on DIUPRES is available to physicians on request.

Recommended dosage range:
DIUPRES-500—one tablet one to three times a day.
DIUPRES-250—one tablet one to four times a day.
If necessary, other agents may be added.
If the patient is receiving ganglion blocking agents or hydralazine, their dosage should be cut by 50 per cent when DIUPRES is added.

DIUPRES-500

500 mg. DIURIL (chlorothiazide), 0.125 mg. reserpine.
Bottles of 100, 1000.

DIUPRES-250

250 mg. DIURIL (chlorothiazide), 0.125 mg. reserpine.
Bottles of 100, 1000.

a "wide range" antihypertensive

DIUPRES

DIURIL® WITH RESERPINE

1. Rochelle, J. B., III, Bullock, A. C., and Ford, R. V.: Potentiation of antihypertensive therapy by use of chlorothiazide, *J.A.M.A.* 168:410, Sept. 27, 1958. 2. Freis, E. D., Wanko, A., Wilson, I. M., and Parrish, A. E.: Treatment of essential hypertension with chlorothiazide (Diuril), *J.A.M.A.* 166:137, Jan. 11, 1958. 3. Freis, E. D.: Treatment of hypertension. (Presented at the Annual Meeting of Southern Medical Association, Nov. 13, 1957.) 4. Moyer, J. H., Dennis, E., and Ford, R.: Drug therapy (Rauwolfia) of hypertension, *A.M.A. Arch. Int. Med.* 96:530, Oct. 1955. 5. Perera, G. A.: Edema and congestive failure related to administration of rauwolfia serpentina, *J.A.M.A.* 159:439, Oct. 1, 1955. 6. Wilkins, R. W.: Precautions in use of antihypertensive drugs, including chlorothiazide, *J.A.M.A.* 167:801, June 14, 1958.

MSD MERCK SHARP & DOHME, DIVISION OF MERCK & CO., INC., PHILADELPHIA 1, PA.

*DIUPRES and DIURIL (chlorothiazide) are trademarks of Merck & Co., Inc.

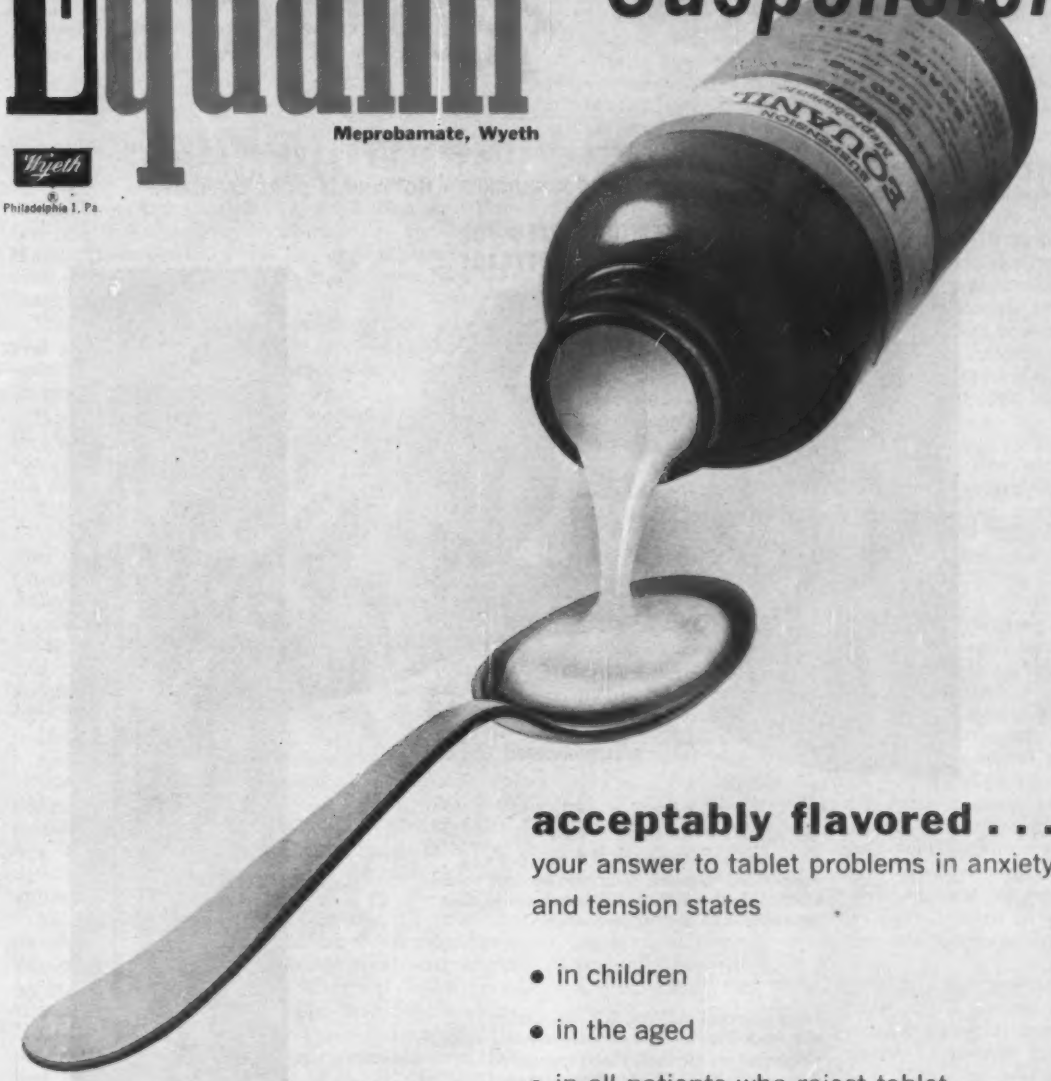
now, for the first time, **liquid** meprobamate

Equanil®

Suspension

Meprobamate, Wyeth

Wyeth®
Philadelphia 1, Pa.



acceptably flavored . . .
your answer to tablet problems in anxiety and tension states

- in children
- in the aged
- in all patients who reject tablet medication

SUPPLIED: Suspension, 200 mg. per 5-cc. teaspoonful, bottles of 4 fluid-ounces. Also available: Tablets, 400 mg., scored, bottles of 50; 200 mg., scored, vials of 50. WYSEALS® EQUANIL, tablets, 400 mg., vials of 50.

RELIEVES TENSION — MENTAL AND MUSCULAR

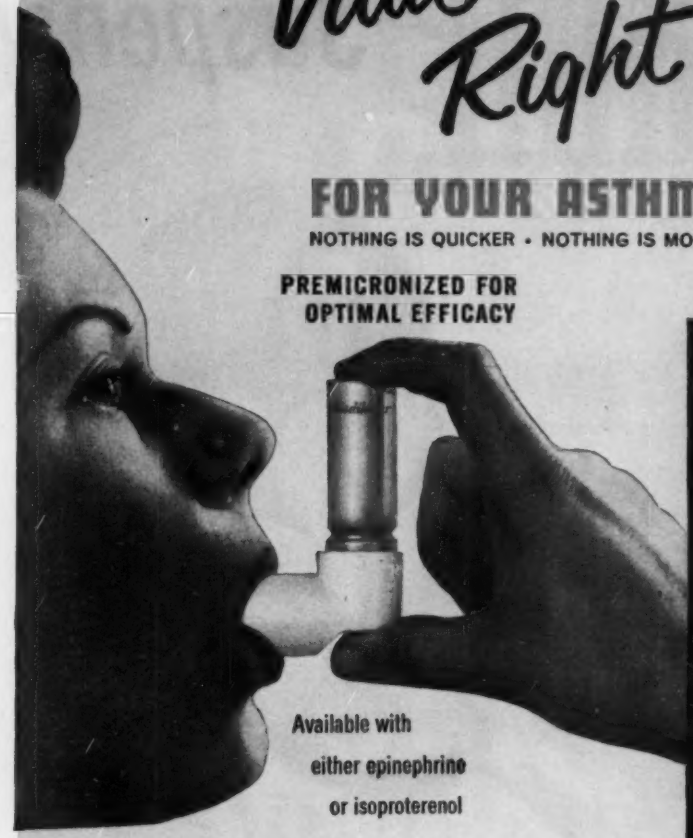
Conforms to Code for Advertising

22½% More Vital Capacity Right Now

FOR YOUR ASTHMATICS

NOTHING IS QUICKER • NOTHING IS MORE EFFECTIVE

PREMICRONIZED FOR OPTIMAL EFFICACY



Available with either epinephrine or isoproterenol

Medihaler-EPI®

Epinephrine bitartrate, 7.0 mg. per cc., suspended in inert, nontoxic aerosol vehicle. Contains no alcohol. Each measured dose contains 0.15 mg. epinephrine.

Medihaler-ISO®

Isoproterenol sulfate, 2.0 mg. per cc., suspended in inert, nontoxic aerosol vehicle. Contains no alcohol. Each measured dose contains 0.06 mg. isoproterenol.

Riker Northridge, California

SUITABLE FOR CHILDREN, TOO.

MEDIHALER®

automatically measured-dose aerosol medications

Nonbreakable • Shatterproof • Spillproof • Leakproof

WASHINGTON NEWS

FROM THE WASHINGTON OFFICE OF THE AMERICAN MEDICAL ASSOCIATION

Federal Research Spending to Remain at About Same Level . .

Federal Scientific Advisory Council to Be Formed "Without Delay" . .

Joint Blood Council Warns of Increasing Waste of Components . .

MEDICAL RESEARCH SPENDING HOLDING UP

The Department of Health, Education, and Welfare will ask Congress to appropriate for the National Institutes of Health approximately 294 million dollars, or about the same amount they now have for research.

Secretary Flemming, discussing financing in general terms at a news conference, said that total spending (new and holdover money) would be "higher than in any previous year."

However, if Congress approves most requests for deficiency and supplemental appropriations before the end of the present fiscal year on June 30, the amount in the budget request might fall below this year's figure.

Without citing specific figures, Mr. Flemming said more money would be asked for a number of programs, including enforcement of pure food and drug laws, scholarships and fellowships, vocational rehabilitation, control of staphylococcus infections, studies with fluorescent-tagged antibodies, research and training in radiological health, air and water pollution programs, research and training in welfare work, and financial assistance to schools of public health.

Among activities the department wants to hold at the present level of spending are grants for maternal and child welfare, grants for general public health work, the National Office of Vital Statistics, occupational health services, studies of chronic disease and health of the aging, and foreign quarantine service.

Mr. Flemming will ask Congress to vote less money than it voted last year for three grants programs—for construction of waste treatment works, for hospital construction (Hill-Burton), and for construction of medical and dental research facilities. However, when carry-over money is included, the programs will have more funds available than they had last year.

Also to be cut under this year's figure are requests for venereal disease and tuberculosis control work and for vocational education. In connection with the latter, Mr. Flemming pointed out that states have not been making use of all federal matching funds for practical nurse training, so there will be no reduction in the program itself.

SCIENTIFIC ADVISORY COUNCIL FORMING

On instructions from President Eisenhower to move "without delay," administration leaders are in the process of establishing a Federal Council for Science and Technology.

"It is my hope," the President said, "that this new council will improve the planning and management of government research programs and facilitate the resolution of common problems and promote greater interagency cooperation."

In approving the new advisory body, Mr. Eisenhower accepted the recommendations of his science advisory committee, which has studied problems of science and research for more than 10 months. The committee also urged that its own chairman, James R. Killian Jr. (Ph.D.), be made chairman of the new council. Because Dr. Killian already is the President's chief scientific adviser, it was regarded as a certainty that he would head the council.

The council will be made up of representatives from the eight government departments and agencies heavily engaged in research. Currently the U. S. is spending about 5 billion dollars in all fields of research, and approximately the same amount is supplied from nonfederal sources. It is estimated that strictly medical research costs the government more than half a billion dollars a year. The National Institutes of Health alone this year are spending 324 million dollars.

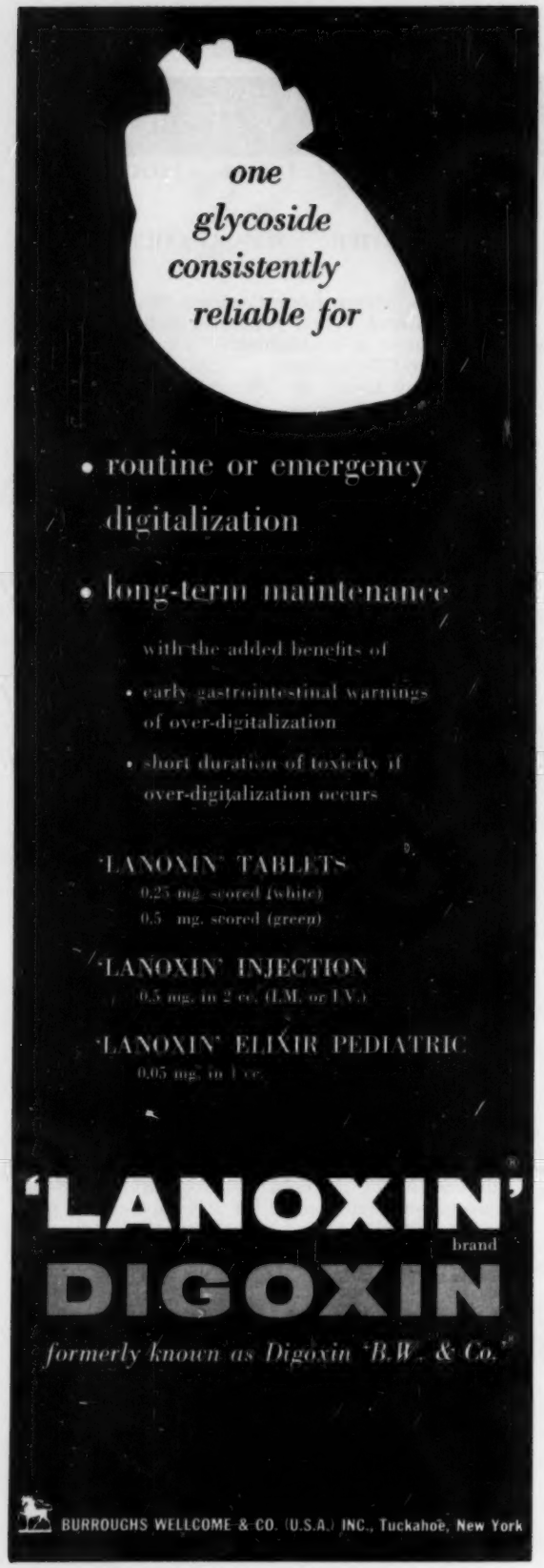
In its study, the committee was asked to devise some method for stimulating and coordinating the nation's research. One suggestion, rejected by the committee and the President, called for establishment of a Federal Department of Research.

The report said the council should, among other things, "consider the impact of Government . . . policies and programs on non-Governmental programs and institutions for the purpose of furthering in every proper way the general advancement of American science and technology. . . . Strengthen Government programs in science and technology by promoting effective utilization of Government resources and by promoting full cooperation among Government agencies in the development of programs and plans to meet the future scientific and technological needs."

The report was highly critical of the confusion, waste, and duplication of effort in the present federal research programs. For one thing, it recommended that the present system of project grants be eliminated and that U. S. funds be allocated through program or institutional grants. On this, the report comments:

"Too often, starts, stops and changes in research programs have thrown the national effort off balance and have damaged morale in laboratories vital to the national defense and well-being."

(Continued on next page)



Greater federal spending on research is proposed in the report. "Serious underinvestment is handicapping programs in many fields—meteorology and climatology, inorganic chemistry, high-temperature research, oceanography, radio astronomy, continental geography, and many of the newer aspects of life sciences such as microbiology, genetics, the study of growth and the neurological foundations of behavior."

JOINT BLOOD COUNCIL CITES COMPONENT WASTAGE

The Joint Blood Council warns that with increasing use of blood, a waste of its components is "becoming more apparent." The council, of which the American Medical Association is a member, in a statement declares:

"With the growing use of blood, a waste of its component parts is becoming more apparent. The council is highly concerned about wastage and supports methods assuring that blood be used properly and to the fullest advantage.

"A wider dissemination of knowledge relating to the use and abuse of blood and its derivatives is indicated and necessary."

To help the loss, the council plans soon to assist in distributing a statement being prepared by the National Research Council on the preparation and use of separate red cells in the maximum utilization of blood.

Other council developments:

Dr. Robert McClaughry has begun a study of information reported to JBC by national and state emergency blood programs, preparatory to rewriting the council's "Standards for a Blood Transfusion Service." The objective is "an acceptable set of minimum requirements consistent with safe blood handling under extreme emergency situations."

Through JBC, Dr. Robert F. Norris of the University of Pennsylvania and his colleagues are studying transmission of the hepatitis virus to patients from donors who are carriers. They are focusing their attention on those donors whose single blood was given to a patient who later developed viral hepatitis. All physicians and blood bank personnel are invited to participate in the study by making direct contact with Dr. Norris at the Pepper Laboratories of the University of Pennsylvania, Philadelphia 4, Pa.

Coding of data from replies to the JBC comprehensive questionnaires, which went to all known blood transfusion services, is nearing completion, and the report should be ready for publication by late spring.

FDA EMPHASIZES RESPONSIBILITY IN MAILING OF DRUGS

Announcing the convictions of a Philadelphia drug manufacturer and a Roanoke, Va., customer, Food and Drug Administration emphasizes that producers are legally responsible for making sure they ship prescription drugs only to persons authorized to distribute and dispense them.

Professional Products Co. and Raymond Steiner, a partner, were convicted of shipping drugs in interstate commerce to a chiropractor not licensed by his state to dispense drugs, of shipping drugs with-

out adequate directions for use on the label, and of shipping vitamins that had lost their potency. Both defendants were convicted and fined. In the course of this case, FDA learned that the company also was selling dangerous prescription drugs to another unauthorized person, Woodrow C. Brightwell of Roanoke. FDA says Brightwell sold the drugs to his friends. Brightwell was fined, as were two other defendants convicted of reselling drugs purchased from him.

HEW ASKS MORE MONEY FOR CHILDREN'S 'OPEN HEART' OPERATIONS

Among the supplemental appropriations to be sought by the Department of Health, Education, and Welfare, from the new Congress is $1,500,000 to replenish funds for surgery in children suffering from congenital heart conditions. Secretary Flemming said increasing demands for such surgery have exhausted funds available to support state programs for the current fiscal year.

The number of children with congenital heart disease who receive medical services under state crippled children's programs had increased from 2,200 in 1950 to 10,000 in 1957. Under the federal-state program, states are required to provide $1 for each $2 provided by the federal government. The U. S. Children's Bureau says if the supplemental is approved, a total of $2,250,000 will be available.

The bureau estimated the average cost to a family of new surgical techniques, particularly open heart surgery, is about $2,500. This includes all hospital and medical care costs, diagnostic preparation, and the use of a number of expensive machines.

U. S. FUNDS ASKED TO TRAIN STATE FOOD-DRUG OFFICIALS

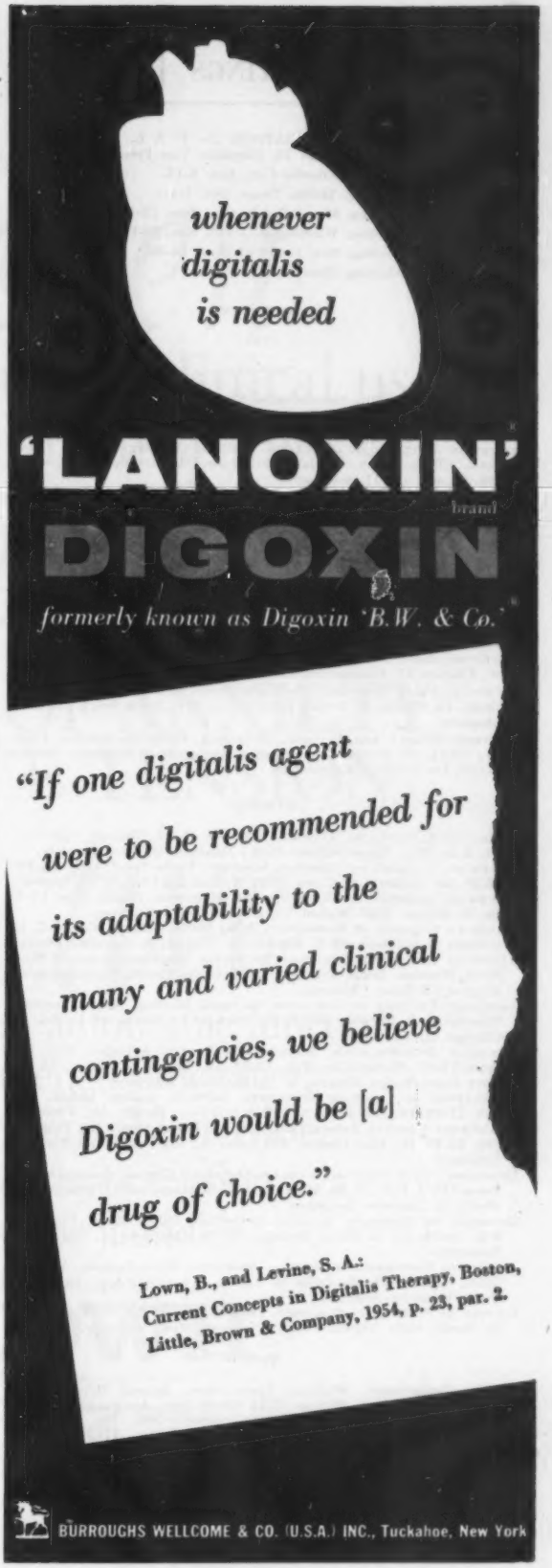
Use of federal funds to help support training schools for state and local food and drug officers has been proposed to Secretary Flemming by the Association of Food and Drug Officials. The proposal was made during another of the Health, Education, and Welfare Department's conferences with national organizations concerned with problems in the food and drug field.

The association pointed out that there are now no schools that give formal training for food and drug inspectors and that agents are badly needed. The association also deplored the fact that only 27 states have some form of a uniform food and drug law. Mr. Flemming agreed with this, saying the states have moved "very slowly."

Conferees also cited the lack of funds for the Food and Drug Administration enforcement operations and urged consideration of this problem by Congress.

HEW reported that scientific findings show the present federal law regulating use of coal tar colors in foods, drugs, and cosmetics needs revision and that the government should be permitted to specify the conditions under which a color may be employed when it is approved for use in such products.

FDA Commissioner George Larrick announced the resignation as medical director of Dr. Albert H. Holland Jr., to return to private industry where he has purchased a share in a medical advertising agency. Dr. Holland served FDA for five years.


whenever
digitalis
is needed
'LANOXIN'
brand
DIGOXIN
formerly known as Digoxin 'B.W. & Co.'
"If one digitalis agent were to be recommended for its adaptability to the many and varied clinical contingencies, we believe Digoxin would be [a] drug of choice."
Lown, B., and Levine, S. A.:
Current Concepts in Digitalis Therapy, Boston,
Little, Brown & Company, 1954, p. 23, par. 2.
BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

MEETINGS

AMERICAN MEDICAL ASSOCIATION: Dr. F. J. L. Blasingame, 535 North Dearborn St., Chicago 10, Executive Vice President

1939 Annual Meeting, Atlantic City, June 8-12.

1939 Clinical Meeting, Dallas, Texas, Dec. 1-4.

1940 Annual Meeting, Miami Beach, Fla., June 13-17.

1940 Clinical Meeting, Washington, D. C., Nov. 29-Dec. 2.

1941 Annual Meeting, New York City, June 26-30.

1941 Clinical Meeting, Denver, Nov. 28-Dec. 1.

AMERICAN

1939

January

AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS, Palmer House, Chicago, Jan. 24-29. Dr. Clinton L. Compere, 720 N. Michigan Ave., Chicago 11, Secretary.

AMERICAN COLLEGE OF SURGEONS, Sectional Meeting, Francis Marion Hotel, Charleston, S. C., Jan. 19-21. Dr. Michael L. Mason, 40 E. Erie St., Chicago 11, Secretary.

AMERICAN PROTESTANT HOSPITAL ASSOCIATION, Jefferson Hotel, St. Louis, Jan. 27-30. Mr. Leo M. Lyons, 105 W. Adams St., Chicago, Executive Director.

AMERICAN SOCIETY FOR SURGERY OF THE HAND, Palmer House, Chicago, Jan. 23-24. Dr. George S. Phalen, 2020 E. 93rd St., Cleveland 6, Secretary.

INTERNATIONAL MEDICAL ASSEMBLY OF SOUTHWEST TEXAS, Gunther Hotel, San Antonio, Tex., Jan. 26-28. Mr. S. E. Cockrell Jr., 202 W. French Pl., San Antonio, Tex., Executive Secretary.

NATIONAL ASSOCIATION OF METHODIST HOSPITALS AND HOMES, Sheraton-Jefferson Hotel, St. Louis, Jan. 27-29. Mr. Olin E. Oeschger, 740 Rush St., Chicago 11, General Secretary.

ROCKY MOUNTAIN TRAUMATIC SURGICAL ASSOCIATION, Aspen, Colo., Jan. 28-31. Dr. Charles B. Bartell, 1600 Orange Ave., Long Beach 13, Calif., Secretary.

WESTERN SOCIETY FOR CLINICAL RESEARCH, Carmel-by-the-Sea, Calif., Jan. 29-31. Dr. William N. Valentine, University of California Medical Center, Los Angeles 24, Secretary.

February

AMERICAN ACADEMY OF ALLERGY, Morrison Hotel, Chicago, Feb. 9-11. Dr. Bram Rose, Royal Victoria Hosp., Montreal, Quebec, Secretary.

AMERICAN ACADEMY OF FORENSIC SCIENCES, Drake Hotel, Chicago, Feb. 26-28. Dr. Walter J. R. Camp, 1853 W. Polk St., Chicago 12, Secretary.

AMERICAN ACADEMY OF OCCUPATIONAL MEDICINE, Boston, Feb. 11-13. Dr. L. Blaney, 1608 Walnut St., Philadelphia 3, Secretary.

AMERICAN COLLEGE OF RADIOLOGY, Drake Hotel, Chicago, Feb. 6-7. Mr. William C. Stronach, 20 N. Wacker Dr., Chicago 6, Executive Director.

AMERICAN COLLEGE OF SURGEONS, SECTIONAL MEETING, Shamrock Hilton Hotel, Houston, Texas, Feb. 2-4. Dr. J. Griffin Heard, 6410 Fannin St., Houston 25, Texas, Chairman.

AMERICAN COLLEGE OF SURGEONS, Sectional Meeting, Hotel Vancouver, Vancouver, B. C., Feb. 26-28. Dr. Michael L. Mason, 40 E. Erie St., Chicago 11, Secretary.

AMERICAN OTORHINOLOGIC SOCIETY FOR PLASTIC SURGERY, INC., Del Prado Hotel, Mexico City, Feb. 15-25. Dr. Joseph G. Gilbert, 75 Barberry Lane, Roslyn Heights, N. Y., Executive Secretary.

ASSOCIATION OF CLINICAL SCIENTISTS, Scientific Session, Mobile, Ala., Feb. 27-28. Dr. Earl B. Wert, Mobile Infirmary, Mobile, Ala., Chairman.

CALIFORNIA MEDICAL ASSOCIATION, Sheraton-Palace Hotel, San Francisco, Feb. 22-25. Mr. John Hunton, 450 Sutter St., San Francisco 8, Executive Secretary.

COLORADO STATE MEDICAL SOCIETY, Midwinter Clinical Session, Shirley-Savoy Hotel, Feb. 17-20. Mr. Harvey T. Sethman, 1612 Tremont Place, Denver 2, Executive Secretary.

CONGRESS ON IDUSTRIAL HEALTH, Netherland Hilton Hotel, Cincinnati, Feb. 16-18. Dr. B. Dixon Holland, 535 N. Dearborn St., Chicago 10, Secretary.

MID-SOUTH POSTGRADUATE MEDICAL ASSEMBLY, Hotel Peabody, Memphis, Tenn., Feb. 10-13. Mr. Leslie H. Adams, 774 Adams Ave., Memphis 5, Tenn., Executive Secretary.

SOCIETY OF UNIVERSITY SURGEONS, Denver, Colo., Feb. 12-14. Dr. James D. Hardy, Univ. Medical Center, Jackson, Miss., Secretary.

March

ALASKA TERRITORIAL MEDICAL ASSOCIATION, Baranof Hotel, Juneau, March. Dr. Robert B. Wilkins, 1121 Fourth Ave., Anchorage, Secretary.

AMERICAN BRONCHO-ESOPHAGOLOGICAL ASSOCIATION, The Homestead, Hot Springs, Va., Mar. 8-9. Dr. F. Johnson Putney, 1712 Locust St., Philadelphia 3, Secretary.

AMERICAN COLLEGE OF ALLERGISTS, Fairmont Hotel, San Francisco, Mar. 15-20. Dr. M. Coleman Harris, 450 Sutter St., San Francisco, Secretary.

AMERICAN COLLEGE OF SURGEONS, Sectional Meeting for Surgeons and Nurses, Kiel Auditorium, St. Louis, Mar. 9-12. Dr. Michael L. Mason, 40 E. Erie St., Chicago 11, Secretary.

AMERICAN LARYNGOLOGICAL ASSOCIATION, The Homestead, Hot Springs, Va., Mar. 8-9. Dr. James H. Maxwell, University Hospital, Ann Arbor, Mich., Secretary.

AMERICAN LARYNGOLOGICAL, RHINOLOGICAL & OTOLOGICAL SOCIETY, The Homestead, Hot Springs, Va., Mar. 10-12. Dr. C. Stewart Nash, 708 Medical Arts Bldg., Rochester 7, N. Y., Secretary.

AMERICAN ORTHOPSYCHIATRIC ASSOCIATION, Sheraton-Palace Hotel, San Francisco, Mar. 30-Apr. 1. Dr. Marion F. Langer, 1790 Broadway, New York 19, Executive Secretary.

AMERICAN OTOLOGICAL SOCIETY, The Homestead, Hot Springs, Va., Mar. 13-14. Dr. Lawrence R. Boies, University Hospital, Minneapolis 14, Secretary.

AMERICAN SOCIETY OF FACIAL PLASTIC SURGERY, New York City, Mar. 18. Dr. Samuel M. Bloom, 123 E. 83rd St., New York 28, Secretary.

MICHIGAN ACADEMY OF GENERAL PRACTICE, Spring Symposium on the "Overweight and Underweight," Sheraton-Cadillac Hotel, Detroit, Mar. 4. Dr. F. P. Rhoades, 970 Maccabees Bldg., Detroit 2, Convention Manager.

NATIONAL HEALTH COUNCIL, Palmer House, Chicago, Mar. 17-19. Mr. Philip E. Ryan, 1790 Broadway, New York 19, Executive Director.

NATIONAL MULTIPLE SCLEROSIS SOCIETY, New York, Mar. 9. Mr. Donald Vail, 257 4th Ave., New York 10, Secretary.

NEW ORLEANS GRADUATE MEDICAL ASSEMBLY, Roosevelt Hotel, New Orleans, Mar. 2-5. Maurice E. St. Martin, 1430 Tulane Ave., New Orleans 12, Secretary.

SOUTHEASTERN SURGICAL CONGRESS, Deauville Hotel, Miami Beach, Fla., Mar. 9-12. Dr. Benjamin T. Beasley, 45 Edgewood Ave., S. E., Atlanta 3, Ga., Secretary.

SOUTHWESTERN SURGICAL CONGRESS, New Brown Palace Hotel, Denver, Mar. 30-Apr. 1. Dr. C. M. O'Leary, 1213 Medical Arts Bldg., Oklahoma City, Okla., Secretary.

April

AERO MEDICAL ASSOCIATION, Hotel Statler, Los Angeles, Apr. 27-29. Dr. Thomas H. Sutherland, P. O. Box 26, Marion, Ohio, Secretary.

ALABAMA, MEDICAL ASSOCIATION OF THE STATE OF, Birmingham, Apr. 9-11. Mr. William A. Dozier, 17 Moulton Bldg., Montgomery, Executive Secretary.

AMERICAN ACADEMY OF GENERAL PRACTICE, San Francisco, Apr. 6-9. Mr. Mac F. Cahal, Wolker Blvd., at Brookside, Kansas City 12, Mo., Executive Secretary.

AMERICAN ACADEMY OF NEUROLOGY, Statler Hotel, Los Angeles, Apr. 13-18. Dr. Joseph M. Foley, Boston City Hosp., Boston, Secretary.

AMERICAN ASSOCIATION OF ANATOMISTS, Seattle, Apr. 1-3. Dr. B. Flexner, Univ. of Pa., Med. School, Philadelphia 4, Secretary.

AMERICAN ASSOCIATION FOR CLEFT PALATE REHABILITATION, Sheraton Hotel, Philadelphia, Apr. 30-May 2. Dr. D. C. Spriestersbach, Univ. Hosps., Iowa City, Ia., Secretary.

AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS, Seaview Country Club, Absecon, N. J., Apr. 15-17. Dr. William J. Engel, 2020 E. 93d St., Cleveland 6, Secretary.

AMERICAN ASSOCIATION OF IMMUNOLOGISTS, Atlantic City, N. J., Apr. 13-17. Dr. Calderon Howe, 630 W. 168th St., New York 32, Secretary.

AMERICAN ASSOCIATION OF PATHOLOGISTS AND BACTERIOLOGISTS, Somerset Hotel, Boston, Apr. 23-25. Dr. Russell L. Holman, 1542 Tulane Ave., New Orleans 12, Secretary.

AMERICAN ASSOCIATION OF RAILWAY SURGEONS, Drake Hotel, Chicago, Apr. 16-18. Dr. Chester C. Guy, 5800 Stony Island Ave., Chicago 37, Secretary.

AMERICAN ASSOCIATION FOR THE STUDY OF NEOPLASTIC DISEASES, Hotel Greystone, Gatlinburg, Tenn., Apr. 30-May 4. Dr. Bruce H. Sisler, Box 268, Gatlinburg, Tenn., Secretary.

AMERICAN ASSOCIATION FOR THORACIC SURGERY, Statler Hotel, Los Angeles, Apr. 21-23. Dr. Hiram T. Langston, 7730 Carondelet Ave., St. Louis 5, Secretary.

AMERICAN COLLEGE OF OBSTETRICIANS & GYNECOLOGISTS, Traymore Hotel, Atlantic City, N. J., Apr. 5-9. Dr. John C. Ullery, 15 S. Clark St., Chicago 3, Secretary.

AMERICAN COLLEGE OF PHYSICIANS, Conrad Hilton Hotel, Chicago, Apr. 20-24. Mr. E. R. Loveland, 4200 Pine St., Philadelphia 4, Executive Secretary.

AMERICAN COLLEGE OF SURGEONS, Sectional Meeting for Surgeons and Nurses, The Queen Elizabeth Hotel, Montreal, Quebec, Apr. 6-9. Dr. Michael L. Mason, 40 E. Erie St., Chicago 11, Secretary.

AMERICAN GOITER ASSOCIATION, Chicago, Apr. 30-May 2. Dr. John C. McClintock, 149½ Washington Ave., Albany, N. Y., Secretary.

AMERICAN GROUP PSYCHOTHERAPY ASSOCIATION, WESTERN REGIONAL MEETING, Sheraton-Palace Hotel, San Francisco, April 2-3. Dr. H. S. Morgenstern, Langley Porter Clinic, U. C. Medical Center, San Francisco, Chairman.

AMERICAN PHYSIOLOGICAL SOCIETY, Atlantic City, N. J., Apr. 12-16. Dr. Ray G. Daggs, 9650 Wisconsin Ave., Washington, D. C., Executive Secretary.

(Continued on page 34)

Proven

in over three years of clinical use
in over 600 clinical studies

Specific

FOR RELIEF OF ANXIETY
AND MUSCLE TENSION

Selective

Does not interfere with autonomic function
Does not impair mental efficiency,
motor control, or normal behavior
Has not produced hypotension,
agranulocytosis or jaundice

MEPROBAMATE (WALLACE)

Miltown®

Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets.

WALLACE LABORATORIES, New Brunswick, N. J.

CM-8049

Fostex®

treats their **acne** while they wash

. . . AND THIS IS HOW IT WORKS

Patients wash acne skin with Fostex instead of using soap. Fostex washes off excess oil. It unblocks pores by penetrating and softening blackheads. It dries and peels the skin, removing papule coverings, thus permitting drainage of sebaceous glands.

Fostex contains Sebulytic®,* a combination of surface-active wetting agents with remarkable antiseborrheic, keratolytic and antibacterial actions . . . enhanced by sulfur 2%, salicylic acid 2%, hexachlorophene 1%.

*sodium lauryl sulfoacetate, sodium alkyl aryl polyether sulfonate and sodium dioctyl sulfosuccinate.

FOSTEX CREAM
. . . in 4.5 oz. jars

FOSTEX CAKE
. . . in bar form

Write for samples

WESTWOOD PHARMACEUTICALS
Buffalo 13, New York

American Psychiatric Association, Civic Auditorium, Philadelphia, Apr. 27-May 1. Dr. C. H. Hardin Branch, 136 Westwinster Ave., Salt Lake City, Secretary.

American Radium Society, The Homestead, Hot Springs, Va., Apr. 6-8. Dr. Robert L. Brown, Robert Winship Clinic, Emory University, Atlanta 22, Ga., Secretary.

American Society for Artificial Internal Organs, Shelburne Hotel, Atlantic City, N. J., Apr. 12-13. Dr. Charles K. Kirby, 110 Maloney Bldg., University Hospital, S. E. Corner 36th and Spruce Sts., Philadelphia 4, Secretary.

American Society of Biological Chemists, Atlantic City, N. J., Apr. 13-18. Dr. F. W. Putnam, Univ. of Fla. Medical School, Gainesville, Fla., Secretary.

American Society for Experimental Pathology, Atlantic City, N. J., Apr. 13-18. Dr. J. F. A. McManus, Univ. of Alabama Medical Center, Birmingham 3, Ala., Secretary.

American Society of Internal Medicine, Conrad Hilton Hotel, Chicago, Apr. 19. Dr. Clyde C. Greene Jr., 350 Post St., San Francisco 8, Assistant Secretary.

American Society for Pharmacology and Experimental Therapeutics, Atlantic City, N. J., Apr. 13-17. Dr. Harold Hodge, Univ. of Rochester, Rochester 20, N. Y., Secretary.

American Society for the Study of Sterility, Shelburne Hotel, Atlantic City, N. J., Apr. 3-5. Dr. Herbert H. Thomas, 920 S. 19th St., Birmingham 5, Ala., Secretary.

American Surgical Association, Fairmont Hotel, San Francisco, Apr. 15-17. Dr. W. A. Altemeier, Cincinnati Gen. Hospital, Cincinnati 29, Secretary.

American Urological Association, Chalfonte-Haddon Hall, Atlantic City, N. J., Apr. 20-23. Dr. Samuel L. Raines, 188 S. Bellevue Blvd., Memphis, Tenn., Secretary.

American Venereal Disease Association, Johns Hopkins University, Baltimore, Apr. 27-28. Dr. S. Ross Taggart, 1325 Upshur St., N. W., Washington 11, D. C., Secretary-Treasurer.

Arizona Medical Association, San Marcos Hotel, Chandler, Apr. 28-May 2. Dr. Leslie B. Smith, 826 Security Bldg., Phoenix, Secretary.

Arkansas Medical Society, Goldman Hotel, Ft. Smith, Apr. 13-15. Mr. Paul C. Schaefer, 215 Kelley Bldg., Ft. Smith, Executive Secretary.

Connecticut State Medical Association, Hamden High School, Hamden, Apr. 28-30. Dr. William R. Richards, 160 St. Ronan St., New Haven, Executive Secretary.

Hawaii Medical Association, Hilo, Apr. 23-25. Mr. Lee McCaslin, 510 S. Beretania St., Honolulu 13, Executive Secretary.

Industrial Medical Association, Sherman Hotel, Chicago, Apr. 26-29. Dr. Leonard Arling, 3101 University Ave., S. E., Minneapolis 14, Secretary.

Iowa State Medical Society, Savery Hotel, Des Moines, Apr. 19-22. Mr. Donald L. Taylor, 529 36th St., Des Moines, Executive Secretary.

Maryland, Medical and Chirurgical Faculty of the State of, The Alcazar Hotel, Baltimore, Apr. 15-17. Mr. John Sargeant, 1211 Cathedral St., Baltimore, Executive Secretary.

Mid-Central States Orthopaedic Society, Town House, Omaha, Apr. 9-11. Dr. H. O. Marsh, 3244 E. Douglas, Wichita, Kan., Secretary.

Missouri State Medical Association, Kansas City, Apr. 5-8. Mr. T. R. O'Brien, 634 N. Grand Blvd., St. Louis, Executive Secretary.

Nebraska State Medical Association, Hotel Paxton, Omaha, Apr. 27-30. Mr. M. C. Smith, 1315 Sharp Bldg., Lincoln 8, Executive Secretary.

Neurosurgical Society of America, The Homestead, Hot Springs, Va., Apr. 1-4. Dr. Frank P. Smith, 260 Crittenden Blvd., Rochester 20, N. Y., Secretary.

New Jersey, Medical Society of, Chalfonte-Haddon Hall, Atlantic City, Apr. 25-29. Mr. Richard I. Nevin, P. O. Box 904, Trenton, Executive Officer.

Ohio State Medical Association, Neil House, Columbus, Apr. 21-24. Mr. Charles S. Nelson, 79 E. State St., Columbus, Executive Secretary.

Oklahoma State Medical Association, Mayo Hotel, Tulsa, Apr. 19-22. Mr. R. H. Graham, P. O. Box 9696 Shartel Station, Oklahoma City, Executive Secretary.

Society of Neurological Surgeons, Waldorf-Astoria Hotel, New York, Apr. 27-28. Dr. Bronson S. Ray, 525 E. 68th St., New York 21, Secretary.

Southwest Allergy Forum, Shamrock-Hilton Hotel, Houston, Tex., Apr. 26-28. Dr. Richard H. Jackson, Suite 156, Hermann Professional Bldg., Houston 25, Tex., Secretary.

Student American Medical Association, Morrison Hotel, Chicago, Apr. 30-May 3. Mr. Russell F. Staudacher, 430 N. Michigan, Chicago 11, Executive Secretary.

Tennessee State Medical Association, Peabody Hotel, Memphis, Apr. 12-15. Mr. Jack E. Ballentine, 112 Louise Ave., Nashville 5, Executive Secretary.

Texas Medical Association, San Antonio, Apr. 18-21. Mr. C. Lincoln Williston, 1801 N. Lamar Blvd., Austin, Executive Secretary.

May

American Association for the History of Medicine, Wade Park Manor, Cleveland, May 21-23. Dr. John B. Blake, Smithsonian-Institution, Washington 25, D. C., Secretary.

American Association on Mental Deficiency, Hotel Schroeder, Milwaukee, May 19-23. Dr. Neil A. Dayton, Mansfield State Training School & Hospital, Mansfield Depot, Conn., Secretary-Treasurer.

American College of Cardiology, Benjamin Franklin Hotel, Philadelphia, May 26-29. Dr. Philip Reichert, 480 Park Ave., New York 22, Secretary.

American Federation for Clinical Research, Chalfonte-Haddon Hall, Atlantic City, N. J., May 3. Dr. George E. Schreiner, Georgetown Univ. Hosp., Washington 7, D. C., Secretary.

American Gynecological Society, The Homestead, Hot Springs, Va., May 25-27. Dr. Andrew A. Marchetti, 3800 Reservoir Rd., N. W., Washington 7, D. C., Secretary.

(Continued on page 36)

Back at work . . . no angina in 2 months
. . . *on Metamine® Sustained b.i.d.*

In angina pectoris, even after myocardial infarction, an early return to useful activity is now recognized as of special therapeutic value.[1] Unsurpassed protective medication for the active, employed anginal patient is provided by METAMINE® SUSTAINED, b.i.d. (1 tablet on arising and 1 before the evening meal). There is little danger of a skipped dose; the patient "is more faithful" to this simplified regimen. And METAMINE SUSTAINED protects many patients refractory to other drugs of this type.[2] Moreover, when you prescribe METAMINE SUSTAINED, q. 12 h., your patient requires less nitroglycerin and remains fully responsive to that vital emergency medication. And METAMINE SUSTAINED (aminotrate phosphate, 10 mg., LEEMING) is relatively free of nitrate side effects (nausea, headache, hypotension).[2]

Supplied: bottles of 50 and 500 sustained-release tablets. Also: METAMINE, METAMINE WITH BUTABARBITAL, METAMINE WITH BUTABARBITAL SUSTAINED, METAMINE SUSTAINED WITH RESERPINE.

Thos. Leeming & Co. Inc. New York 17.

1. Slipyan, A.: J.A.M.A. 168:147, Sept. 13, 1958. 2. Fuller, H. L. and Kassel, L. E.: Antibiotic Med. & Clin. Therapy, 3:322, 1956.

cold sufferers never dry

they just blow away...

Until you provide prompt and **PROLONGED RELIEF*** with

Novahistine LP

*A single dose provides relief for as long as 12 hours.

Novahistine LP† combines the action of a quick-acting sympathomimetic with an antihistaminic drug for a *greater* decongestive effect.

Each LP tablet contains:
Phenylephrine hydrochloride..... 20 mg.
Chlorprophenpyridamine maleate..... 4 mg.
Supplied in bottles of 50 and 250 tablets.

Usual Dose: Two tablets, morning and evening. For mild cases (and children), 1 tablet. Occasional patients may require a third daily dose, which can be safely given.

†Trademark

PITMAN-MOORE COMPANY
DIVISION OF ALLIED LABORATORIES, INC.
INDIANAPOLIS 6, INDIANA

American Ophthalmological Society, The Homestead, Hot Springs, Va., May 28-30. Dr. Maynard C. Wheeler, 30 West 59th St., New York 19. Secretary.

American Pediatric Society, The Inn, Buck Hill Falls, Pa., May 6-8. Dr. A. C. McGuinness, 2800 Quebec St., Washington 8, D. C., Secretary.

American Psychosomatic Society, Chalfonte-Haddon Hall, Atlantic City, N. J., May 2-3. Dr. Morton F. Reiser, 265 Nassau Rd., Roosevelt, N. Y., Secretary.

American Society for Clinical Investigation, Haddon Hall, Atlantic City, N. J., May 3-4. Dr. S. J. Farber, 530, 1st Ave., New York 16, Secretary.

American Society of Maxillofacial Surgeons, Palmer House, Chicago, May 10-14. Dr. Orion H. Stuteville, 700 N. Michigan, Chicago 11, Secretary.

American Trudeau Society, Palmer House, Chicago, May 25-27. Dr. E. P. K. Fenger, 1790 Broadway, New York 19, Secretary.

Association of American Physicians, Haddon Hall, Atlantic City, N. J., May 5-6. Dr. Paul B. Beeson, Yale Univ. School of Medicine, New Haven 11, Conn., Secretary.

Florida Medical Association, Americana Hotel, Miami Beach, May 2-6. Mr. Ernest R. Gibson, P. O. Box 2411, Jacksonville 3, Managing Director.

Georgia, Medical Association of, Bon Air Hotel, Augusta, May 17-20. Mr. Milton D. Kreuger, 875 W. Peachtree St., N. W., Atlanta, Executive Secretary.

Illinois State Medical Society, Hotel Sherman, Chicago, May 19-22. Dr. Harold M. Camp, 224 S. Main St., Monmouth, Secretary.

Kansas Medical Society, Jayhawk Hotel, Topeka, May 3-7. Mr. Oliver E. Ebel, 315 W. 4th St., Topeka, Executive Secretary.

Louisiana State Medical Society, Roosevelt Hotel, New Orleans, May 4-6. Dr. C. Grenes Cole, 1430 Tulane Ave., New Orleans 12, Executive Secretary.

Massachusetts Medical Society, Hotel Statler, Boston, May 19-21. Dr. Robert W. Buck, 22 The Fenway, Boston 15, Secretary.

Minnesota State Medical Association, Hotel Duluth, Duluth, May 25-27. Mr. R. R. Rosell, 496 Lowry Medical Arts Bldg., St. Paul 2, Minn., Executive Secretary.

Mississippi State Medical Association, Hotel Buena Vista, Biloxi, May 12-14. Mr. Rowland B. Kennedy, 735 Riverside Dr., Jackson, Executive Secretary.

National Tuberculosis Association, Palmer House, Chicago, May 24-29. Mrs. Wallace B. White, 1790 Broadway, New York 19, Secretary.

New Mexico Medical Society, Mission Mote, Las Cruces, May 5-7. Mr. Ralph R. Marshall, 221 W. Central Ave., Albuquerque, Executive Secretary.

New York, Medical Society of the State of, Hotel Statler, Buffalo, May 9-15. Dr. Walter P. Anderton, 386 Fourth Ave., New York 16, Secretary.

North Carolina, Medical Society of the State of, George Vanderbilt Hotel, Asheville, May 3-6. Mr. James T. Barnes, 203 Capitol Club Bldg., Raleigh, Executive Director.

North Dakota State Medical Association, Prince Hotel, Bismarck, May 2-5. Mr. Lyle A. Limond, Box 1198, Bismarck, Executive Secretary.

Rhode Island Medical Society, Providence, May 12-13. Mr. John E. Farrell, 106 Francis St., Providence 3, Executive Secretary.

Society of American Bacteriologists, Sheraton Jefferson Hotel, St. Louis, May 10-15. Dr. E. M. Foster, University of Wisconsin, Madison 6, Wis., Secretary.

Society for Pediatric Research, The Inn, Buck Hill Falls, Pa., May 8-9. Dr. Clark D. West, Children's Hosp., Cincinnati 29, Secretary.

South Carolina Medical Association, Columbia Hotel, Columbia, May 12-14. Mr. M. L. Meadors, 309 W. Evans St., Florence, Executive Secretary.

Wisconsin, State Medical Society of, Hotel Schroeder, Milwaukee, May 5-7. Mr. Charles H. Crownhart, P. O. Box 1109, Madison 1, Secretary.

June

American Academy of Tuberculosis Physicians, Atlantic City, N. J., June 6. Dr. Oscar S. Levin, P. O. Box 7011, Denver 6, Secretary.

American College of Chest Physicians, Atlantic City, N. J., June 3-7. Mr. Murray Kornfeld, 112 E. Chestnut St., Chicago 11, Executive Director.

American Dermatological Association, Claridge Hotel, Atlantic City, N. J., June 1-4. Dr. Wiley M. Sams, 25 Southeast 2d Ave., Miami, Fla., Secretary.

American Diabetes Association, Chalfonte-Haddon Hall, Atlantic City, N. J., June 6-7. Dr. E. Paul Sheridan, 1 East 45th St., New York 17, Secretary.

American Electroencephalographic Society, Claridge Hotel, Atlantic City, N. J., June 11-14. Dr. Jerome K. Merlis, University Hospital, Baltimore 1, Secretary.

American Gastroenterological Association, Claridge Hotel, Atlantic City, N. J., June 5-6. Dr. Franz J. Ingelfinger, 69 E. Newton St., Boston 18, Secretary.

American Geriatrics Society, Hotel Traymore, Atlantic City, N. J., June 4-5. Dr. Richard J. Kraemer, 2907 Post Rd., Warwick, R. I., Secretary.

American Medical Association, Traymore Hotel, Atlantic City, N. J., June 8-12. Dr. F. J. L. Blasingame, 535 N. Dearborn St., Chicago 10, Executive Vice President.

American Medical Women's Association, Sheraton Ritz Carlton Hotel, Atlantic City, N. J., June 4-7. Miss Lillian T. Majally, 1790 Broadway, New York 19, Executive Secretary.

American Neurological Association, Claridge Hotel, Atlantic City, N. J., June 15-17. Dr. Charles Rupp, 133 S. 36th St., Philadelphia 4, Secretary.

(Continued on page 40)

AN AMES CLINIQUICK™

CLINICAL BRIEFS FOR MODERN PRACTICE

What percentage of asthmatic attacks in children 10 years of age or less are preceded by definite prodromal symptoms?

Eighty per cent. Of these, 90 per cent show respiratory prodromes: sneezing, nasal discharge, cough; 10 per cent have ocular prodromes for the most part: the eyes tear and appear "...glassy, staring, pale or peculiar."

Source—Glaser, J.: Pediat. Clin. North America *4*:293 (Feb.) 1957.

Weight-proportioned dosage for your asthmatics—New ¼ Strength AMINET provides more precise dosage for children weighing over 40 pounds ...helps to avoid possible aminophylline overdosage. Unique, nonreactive base never inactivates aminophylline...melts promptly at body temperature...facilitates fast absorption of prescribed dose.

	Aminophylline	Pentobarbital Sodium	Benzocaine
NEW ¼ Strength *for children over 40 lbs.* (18 Kg.)	0.125 Gm. (1⅞ gr.)	0.025 Gm. (⅜ gr.)	0.15 Gm. (¼ gr.)
Half Strength *for individuals over 80 lbs.* (36 Kg.)	0.25 Gm. (3¾ gr.)	0.05 Gm. (¾ gr.)	0.03 Gm. (½ gr.)
Full Strength *for adults*	0.5 Gm. (7½ gr.)	0.1 Gm. (1½ gr.)	0.06 Gm. (1 gr.)

ALL 3 DOSAGE FORMS NOW IN PROTECTIVE FOIL STRIPS

Available: Boxes of 12.

AMES
COMPANY, INC
Elkhart • Indiana
Toronto • Canada

61099

for depression

▲Deprol▲†

Clinically confirmed in over 2,500 documented case histories[1,2]

CONFIRMED EFFICACY

Deprol ► acts promptly to control depression *without* stimulation

► restores natural sleep

► reduces depressive rumination and crying

DOCUMENTED SAFETY

Deprol is unlike amine-oxidase inhibitors

► does not adversely affect blood pressure or sexual function

► causes no excessive elation

► produces no liver toxicity

► does not interfere with other drug therapies

Deprol is unlike central nervous stimulants

► does not cause insomnia

► produces no amphetamine-like jitteriness

► does not depress appetite

► has no depression-producing aftereffects

► can be used freely in hypertension and in unstable personalities

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

Composition: Each tablet contains 400 mg. meprobamate and 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl).

Supplied: Bottles of 50 scored tablets.

1. Alexander, L.: Chemotherapy of depression—Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. 166:1019, March 1, 1958. 2. Current personal communications; in the files of Wallace Laboratories.

†TRADE-MARK

CD-7488

Literature and samples on request WALLACE LABORATORIES, *New Brunswick, N.J.*

American Orthopedic Association, Lake Placid Club, Lake Placid, N. Y., June 16-18. Dr. Lee Ramsay Straub, 715 Lake St., Oak Park, Ill., Secretary.

American Proctologic Society, Shelburne Hotel, Atlantic City, N. J., June 15-18. Dr. Norman D. Nigro, 10 Peterboro St., Detroit 1, Secretary.

American Rheumatism Association, Mayflower Hotel, Washington, D. C., June 2-6. Dr. Edward F. Hartung, 580 Park Ave., New York 21, Secretary.

American Therapeutic Society, Shelburne Hotel, Atlantic City, N. J., June 4-7. Dr. Oscar B. Hunter Jr., 915-19th St., N. W., Washington 6, D. C., Secretary.

Association for Research in Ophthalmology, Inc., Atlantic City, N. J., June 8-12. Dr. Lorand V. Johnson, 10515 Carnegie Ave., Cleveland 6, Secretary-Treasurer.

Catholic Hospital Association of the United States and Canada, St. Louis, June 1-4. Mr. M. R. Kneifl, 1438 S. Grand Blvd., St. Louis 4, Executive Secretary.

Idaho State Medical Association, Sun Valley, June 14-17. Mr. Armand L. Bird, 364 Sonna Bldg., Boise, Executive Secretary.

International Cardiovascular Society, North American Chapter, Hotel Shelbourne, Atlantic City, N. J., June 6. Dr. Paul T. DeCamp, 3503 Prytania St., New Orleans, Secretary.

Maine Medical Association, The Samoset, Rockland, June 21-23. Dr. Daniel F. Hanley, P. O. Box 240, Brunswick, Executive Director.

Medical Library Association, King Edward-Sheraton Hotel, Toronto, Can., June 15-19. Miss Nettie A. Mehne, The Upjohn Co., Kalamazoo, Mich., Secretary.

Society for Investigative Dermatology, Ritz Carlton Sheraton Hotel, Atlantic City, N. J., June 6-7. Dr. Herman Beerman, 255 S. 17th St., Philadelphia 3, Secretary.

Society of Biological Psychiatry, Claridge Hotel, Atlantic City, N. J., June 13-14. Dr. George N. Thompson, 2010 Wilshire Blvd., Los Angeles 57, Secretary.

South Dakota State Medical Association, Sheraton Johnson Hotel, Rapid City, June 20-23. Mr. John C. Foster, 300, 1st National Bank Bldg., Souix Falls, Executive Secretary.

The Endocrine Society, Chalfonte-Haddon Hall, Atlantic City, N. J., June 4-6. Dr. Henry T. Turner, 1200 N. Walker St., Oklahoma City 3, Secretary.

Wyoming State Medical Association, Jackson Lake Lodge, Moran, June 11-14. Mr. Arthur R. Abbey, Box 2036, Cheyenne, Executive Secretary.

July

American Society of Facial Plastic Surgery, New York City, July 15. Dr. Samuel M. Bloom, 123 E. 83rd St., New York 28, Secretary.

American Society of X-ray Technicians, Shirley Savoy Hotel, Denver, July 4-9. Miss Genevieve J. Eilert, 16 14th St., Fond du Lac, Wis., Executive Secretary.

Rocky Mountain Cancer Conference, Brown Palace Hotel, Denver, July 22-23. Dr. N. Paul Isbell, 835 Republic Bldg., Denver 2, Chairman.

August

American Hospital Association, Statler Hotel, New York City, Aug. 24-27. Dr. Edwin L. Crosby, 18 E. Division St., Chicago, Director and Secretary.

American Veterinary Medical Association, Hotel Muehlebach, Kansas City, Mo., Aug. 24-28. H. E. Kingman Jr., D.V.M., 600 S. Michigan Ave., Chicago 5, Executive Secretary.

Biological Photographic Association, Inc., Sheraton-Mount Royal Hotel, Montreal, Canada, Aug. 31-Sept. 3. Miss Jane H. Waters, Box 1668, Grand Central P. O., New York 17, Executive Secretary.

National Medical Association, Detroit, Aug. 10-13. Dr. John T. Givens, 1108 Church St., Norfolk, Va., Secretary.

Nevada State Medical Association, Reno, Aug. 19-22. Dr. Gilbert G. Lenz, 505 S. Arlington Ave., Reno, Nev., Chairman.

West Virginia State Medical Association, The Greenbrier, White Sulphur Springs, Aug. 20-22. Mr. Charles Lively, P. O. Box 1031, Charleston 24, Executive Secretary.

September

American Association of Medical Clinics, Sheraton-Blackstone Hotel, Chicago, Sept. 24-26. Dr. Edwin P. Jordan, Box 58, Charlottesville, Va., Executive Secretary.

American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Va., Sept. 10-12. Dr. E. Stewart Taylor, 4200 E. Ninth Ave., Denver 20, Secretary.

American Association for the Surgery of Trauma, Mount Washington Hotel, Bretton Woods, N. H., Sept. 24-26. Dr. William T. Fitts, Jr., 3400 Spruce St., Philadelphia 4, Secretary.

American College of Gastroenterology, Biltmore Hotel, Los Angeles, Sept. 19-26. Mr. Daniel Weiss, 33 W. 60th St., New York 23, N. Y., Executive Director.

American College of Surgeons, The Traymore Hotel, Atlantic City, N. J., Sept. 28-Oct. 2. Dr. Paul R. Hawley, 40 E. Erie St., Chicago 11, Director

American Roentgen Ray Society, The Netherland Hilton Hotel, Cincinnati, Sept. 22-25. Dr. C. Allen Good, Mayo Clinic, Rochester, Minn., Secretary.

American Society of Clinical Pathologists, The Palmer House, Chicago, Sept. 7-11. Mr. Claude E. Wells, 2052 N. Orleans, Chicago 14, Executive Secretary.

Central Association of Obstetricians and Gynecologists, Drake Hotel, Chicago, Sept. 24-26. Dr. Edwin J. DeCosta, 104 S. Michigan Ave., Chicago 3, Secretary.

College of American Pathologists, The Palmer House, Chicago, Sept. 6. Dr. Arthur H. Dearing, Suite 2115 Prudential Plaza, Chicago 1, Executive Director.

Kentucky State Medical Association, Columbia Auditorium, Louisville, Sept. 22-24. Mr. Joseph P. Sanford, 1169 Eastern Pkwy., Louisville 17, Ky., Executive Secretary.

Medical Progress Assembly, Tutwiler Hotel, Birmingham, Ala., Sept. 13-15. Dr. Herbert H. Thomas, 920 S. 19th St., Birmingham, Ala., Chairman, Publicity Committee.

Michigan State Medical Society, Pantlind Hotel, Grand Rapids, Sept. 28-29, Oct. 1-3. Mr. William J. Burns, 606 Townsend St., Lansing 15, Mich., Executive Secretary.

Montana Medical Association, Finlen Hotel, Butte, Sept. 17-19. Mr. L. Russell Hegland, 1236 N. 28th St., Billings, Mont., Executive Secretary.

Oregon State Medical Society, Medford Hotel, Medford, Sept. 23-25. Mr. Roscoe K. Miller, 1115 S.W. Taylor St., Portland 5, Ore., Executive Secretary.

United States Section, International College of Surgeons, Palmer House, Chicago, Sept. 13-17. Dr. Ross T.McIntyre, 1516 Lake Shore Dr., Chicago 10, Executive Secretary.

Washington State Medical Association, Olympic Hotel, Seattle, Sept. 13-16. Mr. Ralph W. Neill, 1309 Seventh Ave., Seattle 1, Executive Secretary.

World Medical Association, Montreal, Canada, Sept. 7-12. Dr. Louis H. Bauer, 10 Columbus Circle, New York 19, Secretary-General.

October

Academy of Psychosomatic Medicine, Sheraton-Cleveland Hotel, Cleveland, Oct. 15-17. For information write: Dr. Bertram B. Moss, Suite 1035, 55 E. Washington St., Chicago 2, Secretary.

American Academy of Ophthalmology and Otolaryngology, The Palmer House, Chicago, Oct. 11-16. Dr. William L. Benedict, 13 Second St. S.W., Rochester, Minn., Executive Secretary.

American Academy of Pediatrics, The Palmer House, Chicago, Oct. 5-8. Dr. E. H. Christopherson, 1801 Hinman Ave., Evanston, Ill., Executive Secretary.

American Association of Medical Record Librarians, Radisson Hotel, Minneapolis, Oct. 12-15. Miss Margaret G. Scully, 510 N. Dearborn St., Chicago 10, Director.

American College of Preventive Medicine, Hotel Ambassador, Atlantic City, N. J., Oct. 21-22. Dr. John J. Wright, P. O. Box 1267, Chapel Hill, N. C., Secretary-Treasurer.

American Medical Writers' Association, St. Louis, Oct. 2-3. Dr. Harold Swanberg, 510 Maine St., Quincy, Ill., Secretary.

American Public Health Association, Convention Hall, Atlantic City, N. J., Oct. 19-23. Dr. Berwyn F. Mattison, 1790 Broadway, New York 19, N. Y., Executive Director.

American School Health Association, Claridge Hotel, Atlantic City, N. J., Oct. 18-23. Dr. A. O. DeWeese, 515 E. Main St., Kent Ohio, Executive Secretary.

American Society of Anesthesiologists, Inc., Americana Hotel, Bal Harbor, Fla., Oct. 5-9. Mr. John W. Andes, 188 W. Randolph St., Room 1101, Chicago 1, Executive Secretary.

American Society of Plastic and Reconstructive Surgery, Hotel Fountainebleau, Miami Beach, Fla., Oct. 18-23. Dr. Thomas Ray Broadbent, 508 E. South Temple, Salt Lake City, General Secretary.

American Society of Tropical Medicine and Hygiene, Claypool Hotel, Indianapolis, Oct. 28-31. Dr. Rolla B. Hill, 3575 St. Gaudens Road, Miami 33, Fla., Executive Secretary.

Association of Life Insurance Medical Directors of America, Hotel Statler Hilton, New York City, Oct. 21-23. Dr. Royal S. Schaaf, Prudential Insurance Co., P. O. Box 594, Newark 1, N. J., Secretary.

Association of Medical Illustrators, Seattle, Oct. 5-7. Miss Rose M. Reynolds, University of Nebraska College of Medicine, 42nd Dewey Ave., Omaha 5, Corresponding Secretary.

Central Neuropsychiatric Association, Hotel Roosevelt, New Orleans, Oct. 16-17. Dr. Ralph M. Patterson, Columbus Psychiatric Institute, 473 W. 12th Ave., Columbus 10, Ohio.

Delaware, Medical Society of, Oct. 14-15. Mr. Lawrence J. Morris Jr., 621 Delaware Ave., Wilmington 1, Del.

Indiana State Medical Association, Murat Temple, Indianapolis, Oct. 6-9. Mr. James A. Waggener, 1021 Hume Mansur Bldg., Indianapolis 4, Executive Secretary.

New Hampshire Medical Society, Equinox House, Manchester, Vt., Oct. 1-4. Mr. Hamilton S. Putnam, 18 School St., Concord, N. H., Executive Secretary.

Pennsylvania, Medical Society of the State of, Penn-Sheraton Hotel, Pittsburgh, Oct. 18-23. Mr. Lester H. Perry, 230 State St., Harrisburg, Pa., Executive Director.

Vermont State Medical Society, Equinox House, Manchester, Oct. 1-4. Mr. Getty Page, 128 Merchants Row, Rutland, Vt., Executive Secretary.

Virginia, Medical Society of, Hotel Roanoke, Roanoke, Oct. 4-5. Mr. Robert I. Howard, 4205 Dover Rd., Richmond 21, Va.

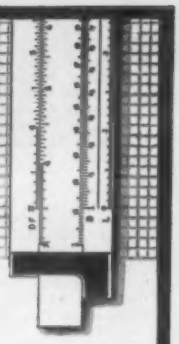
(Continued on page 42)

℞ Tao*

PRONOUNCED TAY-O

(triacetyloleandomycin)

Designed for unexcelled control of common Gram-positive infections



in the patient:

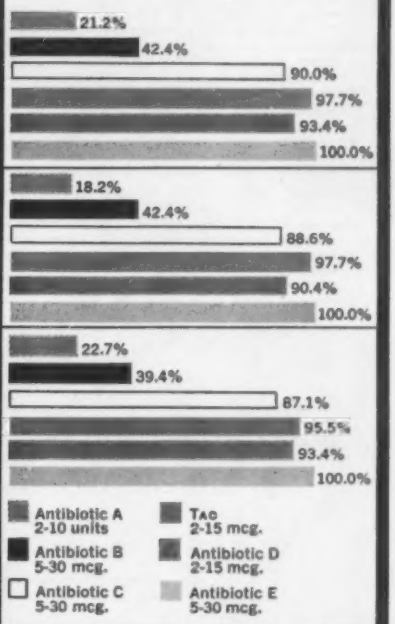
95% effective in published cases[1-6]

Conditions treated	No. of Patients	Cured	Improved	Failure
ALL INFECTIONS	**558**	**449**	**80**	**30**
Respiratory infections	**258**	**209**	**31**	**18**
Pharyngitis and/or tonsillitis	65	58	5	2
Pneumonia	90	65	17	7
Infectious asthma	44	38	–	6
Otitis media	31	29	2	–
Other respiratory (bronchitis, bronchiolitis, bronchiectasis, pneumonitis, laryngotracheitis, strep throat)	28	17	7	4
Skin and soft tissue infections	**230**	**191**	**38**	**1**
Infected wounds, incisions and lacerations	41	33	8	–
Abscesses	51	43	8	–
Furunculosis	58	51	6	1
Acne, pustular	43	28	15	–
Pyoderma	19	19	–	–
Other skin and soft tissue (infected burns, cellulitis, impetigo, ulcers, others)	18	17	1	–
Genitourinary infections	**28**	**16**	**3**	**8**
Acute pyelitis and cystitis	10	8	2	–
Urethritis with gonorrhea or cystitis	8	8	–	–
Pyelonephritis	4	1	–	3
Salpingitis	5	1	1	3
Pelvic inflammation with endometriosis	1	1	–	–
Miscellaneous (adenitis, enteritis, enterocolitis, subacute bacterial endocarditis, fever, hematoma, staphylococcus carriers, osteomyelitis, tenosynovitis, septic arthritis, acute bursitis, periarthritis)	**42**	**30**	**8**	**4**

in the laboratory:

over 90% effective against resistant staph

COMPARATIVE TESTS BY THREE METHODS (DISC, TUBE DILUTION, CYLINDER PLATE) ON 120 STAPHYLOCOCCI[4]



Percentage of organisms inhibited by the range of concentrations listed for each antibiotic.

Other Tao advantages:

Rapidly absorbed – stable in gastric acid,[7] Tao needs no retarding protective coating.

Low in toxicity – freedom from side effects in 96% of patients treated; cessation of therapy is rarely required.

Highly palatable – "practically tasteless"[7] active ingredient in a pleasant cherry-flavored medium.

Dosage and Administration: Dosage varies according to the severity of the infection. For adults, the average dose is 250 mg. q.i.d.; to 500 mg. q.i.d. in more severe infections. For children 8 months to 8 years, a daily dose of approximately 30 mg./Kg. body weight in divided doses has been found effective. Since Tao is therapeutically stable in gastric acid, it may be administered without regard to meals.

Supplied: Tao Capsules—250 mg. and 125 mg., bottles of 60. Tao for Oral Suspension—1.5 Gm., 125 mg. per teaspoonful (5 cc.) when reconstituted; unusually palatable cherry flavor; 2 oz. bottle.

References: 1. Koch, R., and Asay, L. D.: J. Pediat., in press. 2. Leming, B. H., Jr., et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 3. Meilman, et al.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 4. Olansky, S., and McCormick, G. E., Jr.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 5. Shubin, H., et al.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 679. 6. Isenberg, H., and Karelitz, S.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 7. Wennersten, J. R.: Antibiotic Med. & Clin. Therapy 8:527 (Aug.) 1958. 8. Kaplan, M. A., and Goldin, M.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958. 9. Truant, J. P.: Paper presented at the Symposium on Antibiotics, Washington, D. C., Oct. 15-17, 1958.

Tao dosage forms—for specific clinical situations

Tao Pediatric Drops: For children—flavorful, easy to administer. **Supplied:** When reconstituted, 100 mg. per cc. Special calibrated droppers—5 drops (approx. 25 mg. of oleandomycin) and 10 drops (approx. 50 mg. of oleandomycin). 10 cc. bottle.

Intramuscular or Intravenous: For direct action—in clinical emergencies. **Supplied:** In 10 cc. vials.

Roerig

New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being

*Trademark

WESTERN INDUSTRIAL MEDICAL ASSOCIATION, INC., Statler Hotel, Los Angeles, Oct. 2-3. Dr. A. C. Remington, 9851 Sepulveda Blvd., Los Angeles 45, Secretary.

WESTERN ORTHOPEDIC ASSOCIATION, Brown Palace Hotel, Denver, Oct. 18-22. Vi Mathiesen, 354 21st St., Oakland 12, Calif., Executive Secretary.

November

AMERICAN ASSOCIATION OF BLOOD BANKS, Edgewater Beach Hotel, Chicago, Nov. 4-7. Dr. John B. Alsever, Southwest Blood Banks, 1211 W. Washington St., Phoenix, Ariz., Secretary.

AMERICAN CLINICAL AND CLIMATOLOGICAL ASSOCIATION, The Homestead, Hot Springs, Va., Nov. 2-4. Dr. F. Tremaine Billings, 420 Medical Arts Bldg., Nashville, Tenn., Secretary.

AMERICAN FRACTURE ASSOCIATION, Roosevelt Hotel, New Orleans, Nov. 1-5. Dr. H. W. Wellmerling, 610 Griesheim Bldg., Bloomington, Ill., Executive Secretary.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES, Edgewater Beach Hotel, Chicago, Nov. 2-4. Dr. Ward Darley, 2530 Ridge Ave., Evanston, Ill., Executive Director.

ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES, Mayflower Hotel, Washington, D. C., Nov. 8-11. Lt. Col. George M. Beam, AUS, Ret., Suite 718, New Medical Bldg., 1726 Eye St., N. W., Washington 6, D. C., Executive Secretary.

CENTRAL SOCIETY FOR CLINICAL RESEARCH, Drake Hotel, Chicago, Nov. 6-7. Dr. Austin S. Weisberger, 2065 Adelbert Rd., Cleveland 6, Secretary.

DISTRICT OF COLUMBIA, MEDICAL SOCIETY OF, Statler-Hilton Hotel, Washington, D. C., Nov. Mr. Theodore Wiprud, 1718 M Street, N. W., Washington 6, D. C.

GERONTOLOGICAL SOCIETY, INC., Statler Hotel, Detroit, Nov. 12-14. Mrs. Marjorie Adler, 660 S. Kingshighway Blvd., St. Louis 10, Administrative Secretary.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION OF NORTH AMERICA, The Palmer House, Chicago, Nov. 2-5. Mr. Roy T. Ragatz, Box 1109, Madison 1, Wis., Executive Secretary.

NATIONAL PROCTOLOGIC ASSOCIATION, Chicago, Nov. Dr. George E. Mueller, 59 E. Madison, Chicago 2, Secretary.

PUERTO RICO MEDICAL ASSOCIATION, Santurce, Nov. 22-26. Mr. J. A. Sanchez, Box 9111, Santurce 29, Puerto Rico, Executive Secretary.

RADIOLOGICAL SOCIETY OF NORTH AMERICA, INC., Palmer House, Chicago, Nov. 15-20. Dr. Donald S. Childs, 713 E. Genesee St., Syracuse 2, N. Y., Secretary-Treasurer.

SOUTHERN MEDICAL ASSOCIATION, Atlanta, Nov. 16-19. Mr. V. O. Foster, 2601 Highland Ave., Birmingham 5, Ala., Executive Secretary-Treasurer.

WESTERN SURGICAL ASSOCIATION, The Broadmoor, Colorado Springs, Colo., Nov. 19-21. Dr. John T. Reynolds, 612 N. Michigan Ave., Chicago 11, Secretary.

1960

AMERICAN GASTROENTEROLOGICAL ASSOCIATION, Roosevelt Hotel, New Orleans, April 1-2. Dr. Franz J. Ingelfinger, 65 E. Newton St., Boston 18, Secretary.

INTERNATIONAL AND FOREIGN

1959

February

CENTRAL SURGICAL ASSOCIATION, Montreal, Can., Feb. 19-21. Dr. A. D. McLachlin, Victoria Hosp., London, Ontario, Secretary.

March

BAHAMAS MEDICAL CONFERENCE (Seventh), British Colonial Hotel, Nassau, Bahamas, Mar. 30-Apr. 12. For information write: Dr. B. L. Frank, 23 E. 79th St., New York 21, N. Y., U. S. A.

CANADIAN MEDICAL ASSOCIATION, British Columbia Division, Section of General Practice, Harrison Hot Springs Hotel, Harrison Hot Springs, B C., Mar. 19-21. Dr. W. Douglas McCauly, 149 Kenneth St., Duncan, B. C., Registrations.

INTERNATIONAL COMMITTEE OF MILITARY MEDICINE & PHARMACY, Paris, France, Mar. 31-Apr. 5. For information address: International Committee of Military Medicine & Pharmacy, Hospital Militaire, 79, rue Saint Laurent, Liege, Belgium.

April

CONGRESS OF INTERNATIONAL ANESTHESIA RESEARCH SOCIETY, Miami Beach, Fla., U. S. A., Apr. 20-23. Dr. A. William Friend, East 107 & Park Lane, Cleveland 6, Ohio, U. S. A., Executive Secretary.

JAPAN MEDICAL CONGRESS, Tokyo, Japan, Apr. 1-5. For information address: The Japan Medical Association, 2 Chone Surigadai Kanda, Chiyoda-Ku, Tokyo, Japan.

May

CONFERENCE ON INTERNATIONAL UNION FOR HEALTH EDUCATION OF THE PUBLIC, Dusseldorf, Germany, May 2-9. For information address: Secretary-General, 92, rue St. Denis, Paris 1, France.

INTERNATIONAL CONGRESS OF ACUPUNCTURE, Paris, France, May 9-11. For information address: 8 avenue Franklin Roosevelt, Paris 8e, France.

INTERNATIONAL VETERINARY CONGRESS, Madrid, Spain, May 21-27. Dr. Jac Jensen, Beltstraat 168, Utrecht, Netherlands, General Secretary.

June

CANADIAN FEDERATION OF BIOLOGICAL SOCIETIES (CANADIAN PHYSIOLOGICAL SOCIETY, PHARMACOLOGICAL SOCIETY OF CANADA, CANADIAN ASSOCIATION OF ANATOMISTS, CANADIAN BIOCHEMICAL SOCIETY), University of Toronto, Toronto, Ont., Canada, June 9-11. Dr. E. H. Bensley, Room 710, The Montreal General Hospital, Montreal 25, Que.

CONGRESS AND INTERNATIONAL EXHIBIT OF TECHNICIANS OF HEALTH, Parc des Expositions, Porte de Versailles, Paris, France, June 9-12. For information write the Secretariat of the Congress, 37, rue de Montholon, Paris 9e, France.

INTERNATIONAL FERTILITY ASSOCIATION, Amsterdam, Netherlands, June 7-13. For information address: Dr. B. S. ten Berge, Women's Hospital, Groningen, Netherlands.

INTERNATIONAL HOSPITAL CONGRESS, Edinburgh, Scotland, June 1-6. Capt. J. E. Stone, 34 King St., London, E. C. 2, England, Secretary-General.

PAN-AMERICAN CONGRESS OF RHEUMATIC DISEASES, Washington, D. C., U. S. A., June 2-6. Dr. Richard T. Smith, West Point, Pa., U. S. A., Secretary-General.

July

BRITISH MEDICAL ASSOCIATION, Edinburgh, Scotland, July 16-24. For information address: The Secretary, British Medical Association, Tavistock Square, London, W. C. 1, England.

CANADIAN MEDICAL ASSOCIATION, Edinburgh, Scotland, July 16-24. Dr. A. D. Kelly, 150 St. George St., Toronto 5, Ont., General Secretary.

INTERNATIONAL CONGRESS OF PEDIATRICS, Montreal, Que., July 19-25. For information address: Dr. R. L. Denton, 2300 Tupper St., Montreal 25, Que.

INTERNATIONAL CONGRESS OF PLASTIC SURGERY, London, England, July 13-17. Mr. David Matthews, 152 Harley St., London, W. 1, England.

INTERNATIONAL CONGRESS OF RADIOLOGY, Munich, Germany, July 23-30. Prof. Hans v. Braunbehrens, Frankfurt am Main, Forsthausstrasse 76, Germany, General Secretary.

INTERNATIONAL PSYCHOANALYTICAL ASSOCIATION, Copenhagen, Denmark, July 26-30. Miss Pearl King, 37 Albion St., London, W. 2, England, Secretary-General.

August

INTERNATIONAL ASSOCIATION OF LIMNOLOGY, Vienna & Salzburg, Austria, Aug. 20-Sept. 8. For information address: Secretary, Biologische Station, Lunz am See, Austria.

INTERNATIONAL CONGRESS FOR THE HISTORY OF SCIENCE, Barcelona & Madrid, Spain, Aug. 30-Sept. 6. Prof. J. Vernet, Universidad de Barcelona, Barcelona, Spain, Secretary-General.

INTERNATIONAL CONGRESS OF PHYSIOLOGICAL SCIENCES, Buenos Aires, Argentina, Aug. 9-15. A. O. M. Stoppani, Facultad de Ciencias Medicas, Paraguay 2151, Buenos Aires, Argentina.

INTERNATIONAL CONGRESS FOR SPEECH AND VOICE THERAPY, London, England, Aug. 17-22. Miss M. Carter, 46 Cannonbury Square, London, N. 1, England, Secretary.

PAN-AMERICAN CONGRESS OF VETERINARY MEDICINE, Kansas City, Mo., U. S. A., Aug. 23. Dr. Benjamin D. Blood, P. O. Box 99, Azul, Buenos Aires Province, Argentina, Secretary-General.

WORLD CONFERENCE ON MEDICAL EDUCATION, Palmer House, Chicago, Ill., U. S. A., Aug. 30-Sept. 4. For information address: Dr. Louis H. Bauer, 10 Columbus Circle, New York 19, N. Y., U. S. A.

WORLD FEDERATION FOR MENTAL HEALTH, Barcelona, Spain, Aug. 30-Sept. 5. Miss Esther M. Thornton, 19 Manchester St., London, W. 1, England, Secretary-General.

September

CONGRESS OF INTERNATIONAL UNION OF RAILWAY MEDICAL SERVICES, Lucerne, Switzerland, Sept. 21-24. Dr. J. Ortega, 13, rue de Chateau-London, Paris 10, France, Secretary-General.

EUROPEAN CONGRESS OF ALLERGY, London, England, Sept. 2-4. For information address: British Association of Allergists, Wright-Fleming Institute, St. Mary's Hospital, London, W. 2, England.

EUROPEAN CONGRESS ON RHEUMATISM, Istanbul, Turkey, Sept. 18-21. For information address: Professor Hami Kocas, Medical School, Ankara, Turkey.

INTERNATIONAL LEAGUE AGAINST RHEUMATISM, Istanbul, Turkey, Sept. 18-21. For information write: Prof. Hami Kocas, Medical School, Ankara, Turkey.

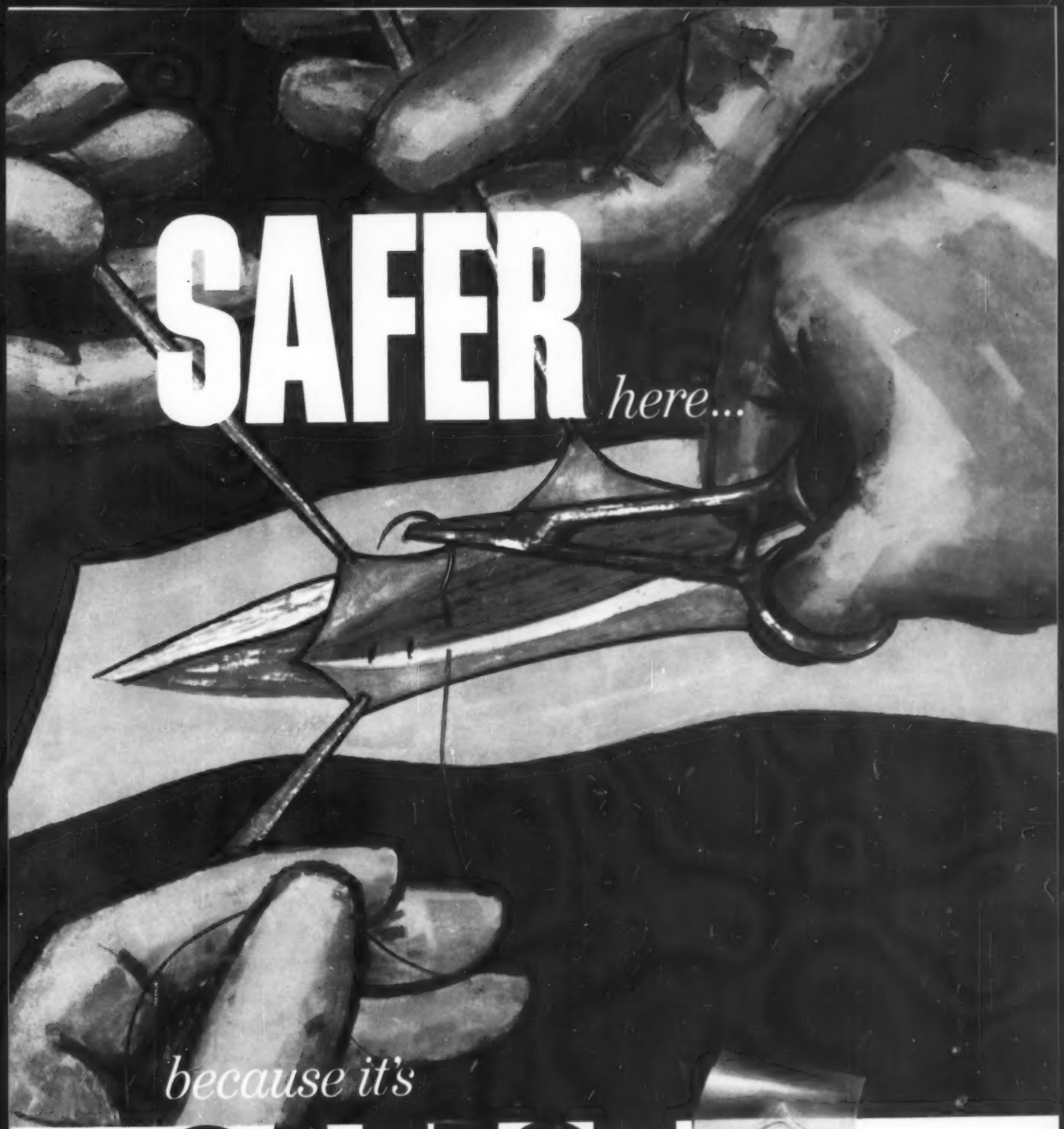
INTERNATIONAL TUBERCULOSIS CONFERENCE, Istanbul, Turkey, Sept. 11-18. Dr. T. I. Gokce, Selime Hatun, Mezarlik Sokak, Taksim, Istanbul, Turkey, Secretary-General.

INTERNATIONAL UNION OF THE MEDICAL PRESS, Cologne, Germany, Sept. 21-24. Dr. Stockhausen, Secretary of Bundesaerztekammer, Cologne, Germany.

WORLD CONGRESS FOR PHYSICAL THERAPY, Paris, France, Sept. 6-12. For information write: Miss M. J. Neilson, Tavistock House, Tavistock Square, London, W. C. 1, England.

WORLD MEDICAL ASSOCIATION, Montreal, Canada, Sept. 7-12. Dr. Louis H. Bauer, 10 Columbus Circle, New York 19, Secretary-General.

(Continued on page 46)



because it's

SAFEST

here!

*D&G SURGILOPE SP**

Sterile Strip Pack Sutures

*Trademark

NOW–CHECK CROSS-CONTAMINATION AT THE SUTURE LEVEL!

ELIMINATE ALL JARS & SOLUTIONS WITH NEW INDIVIDUALLY PACKAGED D&G SURGILOPE SP SUTURES

With exclusive D & G *double-envelope* strip pack sutures each sterile, sealed inner envelope is individually protected until the actual moment of use! Bulk storage in jars and solutions—with all its accompanying uncertainties—is outmoded. A new standard of safety at the suture level is established.

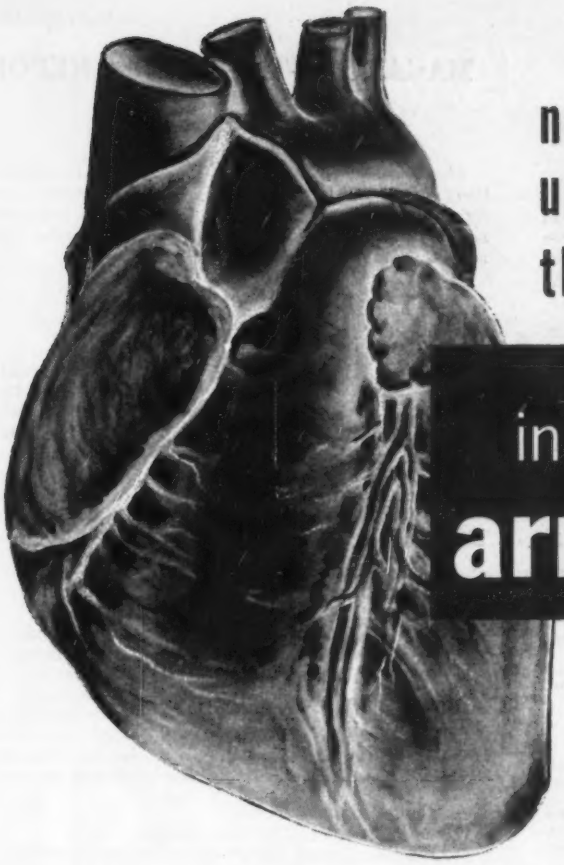
Now available in a complete suture line—absorbable and non-absorbable!

CYANAMID

AMERICAN CYANAMID COMPANY
SURGICAL PRODUCTS DIVISION
NEW YORK, N. Y.

Sales Office: Danbury, Connecticut.

Producers of Davis & Geck Brand Sutures and Vim® Brand Hypodermic Syringes and Needles.
Distributed in Canada by: Cyanamid of Canada Limited, Montreal 16, P.Q.



new
unsurpassed
therapy

in **cardiac arrhythmias**

QUINAGLUTE®
DURA-TAB S.M.

(Brand of Sustained Medication Quinidine Gluconate, 5 gr.)

INDICATIONS: Premature contractions, auricular tachycardia, flutter, fibrillation.

DOSAGE: **For conversion** of auricular fibrillation to normal rhythm, in most cases, 2 Quinaglute Dura-Tab S.M. tablets 3 to 4 times a day, for 2 to 3 days. **For maintenance** 1 to 2 tablets every 10 to 12 hours. SUPPLIED: Bottles of 30, 100 and 250.

samples, reprint and detailed literature

WYNN PHARMACAL
CORPORATION
5119 West Stiles Street
Philadelphia 31, Pa.

1. Bellet, S., Finkelstein, D., and Gilmore, H.: A.M.A. Archives Internal Med. 100:750, 1957.

*Patent Applied For

Successfully treating various arrhythmias with Quinaglute Dura-Tab S.M.®, Bellet and associates[1] cite these major advantages of this long-acting quinidine gluconate*:

- **usually 2 to 3 doses per day — night dose avoided. Each dose maintains plasma levels for from 10 to 12 hours.**
- **elimination of "valleys in plasma concentration" where arrhythmias tend to recur.**
- **a decided reduction of episodes of ectopic rhythm.**
- **better absorption and toleration than quinidine sulfate.**

1960

January

PAN AMERICAN CONGRESS OF OPHTHALMOLOGY, Caracas, Venezuela, Jan. 31-Feb. 7. For information address: Dr. Moacyr, E. Alvaro, 1151 Consolacao, São Paulo, Brazil.

April

ASSOCIATION OF NATIONAL EUROPEAN AND MEDITERRANEAN SOCIETIES OF GASTRO-ENTEROLOGY (ASNEMGE), 6TH CONGRESS, Leiden, Netherlands, Apr. 20-24. For information write ASNEMGE, 22, avenue d'Amerique, Anvers, Belgium.

June

CANADIAN MEDICAL ASSOCIATION, Banff, Alberta, June 13-17. Dr. A. D. Kelly, 150 St. George St., Toronto 5, Ont., General Secretary.

INTERNATIONAL CONGRESS OF CLINICAL PATHOLOGY, Madrid, Spain, June 13-17. Dr. J. Aparicio Garrido, Sandoval 7, Madrid, Spain, Secretary-General.

INTERNATIONAL CONGRESS OF PHYSIO-PATHOLOGY OF ANIMAL REPRODUCTION AND ARTIFICIAL INSEMINATION, Amsterdam, Netherlands, June 13-17. Dr. J. Edwards, Milk Marketing Board, Thames, Surrey, England, Secretary.

July

INTERNATIONAL CONGRESS AGAINST ALCOHOLISM, Stockholm, Sweden, July 31-Aug. 5. Dr. Archer Tongue, Case Gare 49, Lausanne, Switzerland, Secretary-General.

INTERNATIONAL CONGRESS OF ENDOCRINOLOGY, Copenhagen, Denmark, July 18-23. For information address: Dr. Henry H. Turner, 1200 N. Walker, Oklahoma City 3, Okla., U. S. A.

INTERNATIONAL CONGRESS ON GOITER, London, England, July 6-8. For information write: Dr. John C. McClintock, 149½ Washington Ave., Albany, N. Y., U. S. A.

INTERNATIONAL CONGRESS ON OCCUPATIONAL HEALTH, Waldorf-Astoria, New York, N. Y., U. S. A., July 25-29. Dr. Leo Wade, 15 West 51st St., New York, N. Y., U. S. A., Chairman.

August

INTERNATIONAL CONGRESS OF CLINICAL CHEMISTRY, Edinburgh, Scotland, Aug. 14-19. For information address: Dr. S. C. Frazer, Clinical Laboratory, Royal Infirmary, Edinburgh, Scotland.

INTERNATIONAL CONGRESS ON DISEASES OF THE CHEST, sponsored by the Council on International Affairs, American College of Chest Physicians, Vienna, Austria, Aug. 28-Sept. 1. Mr. Murray Kornfeld, 112 E. Chestnut St., Chicago 11, Executive Director.

INTERNATIONAL CONGRESS OF GERONTOLOGY, San Francisco, Calif., U. S. A., Aug. 7-14. Mr. Louis Kuplan, 722 Capitol Ave., Sacramento, Calif., U. S. A., Executive Secretary.

INTERNATIONAL CONGRESS OF PHYSICAL MEDICINE, Washington, D. C., U. S. A., Aug. 21-26. For information write: Dr. W. J. Zeiter, 2020 E. 93d St., Cleveland, Ohio, U. S. A.

INTERNATIONAL SOCIETY OF HEMATOLOGY, Tokyo, Japan, Aug. 25. For information write: Dr. Sol Habermann, 3500 Gaston Ave., Dallas, Tex., U. S. A.

WORLD CONGRESS OF THE INTERNATIONAL SOCIETY FOR THE WELFARE OF CRIPPLES, New York, N. Y., U. S. A., Aug. 29-Sept. 2. Mr. Donald V. Wilson, 701 First Ave., New York 17, N. Y., U. S. A., Secretary-General.

September

CONGRESS OF INTERNATIONAL SOCIETY FOR CELL BIOLOGY, Paris, France, Sept. 7-9. For information write: Prof. Chevremont, 20, rue de Pitteurs, Liege, Belgium.

CONGRESS OF INTERNATIONAL SOCIETY OF ORTHOPEDIC SURGERY & TRAUMATOLOGY, New York, N. Y., U. S. A., Sept. 7-9. For information address: International Society of Orthopedic Surgery & Traumatology, 34 Rue Montoyer, Brussels, Belgium.

INTERNATIONAL CONGRESS OF CRIMINOLOGY, The Hague, Netherlands, Sept. 7-9. For information address: Societe Internationale de Criminologie, 28 avenue de Friedland, Paris 8e, France.

INTERNATIONAL CONGRESS OF NUTRITION, Washington, D. C., U. S. A., Sept. 1-7. Dr. Milton O. Lee, 9650 Wisconsin Ave., Washington 14, D. C., U. S. A., General Secretary.

INTERNATIONAL SOCIETY OF GEOGRAPHICAL PATHOLOGY, London, England, Sept. 7-9. Prof. Fred. C. Roulet, 174 Albanrheinweg, Basle, Switzerland, Secretary-General.

WORLD CONGRESS OF ANESTHESIOLOGISTS, Toronto, Ont., Sept. 4-10. For information write: Dr. R. A. Gordon, 516 Medical Arts Bldg., Toronto 5, Ont.

1961

October

INTERNATIONAL CONGRESS OF NEUROSURGERY, Statler Hotel, Washington, D. C., U. S. A., Oct. 14-20. Dr. Bronson S. Ray, 131 E. 69th St., New York 21, Secretary-General.

MAGAZINE—TELEVISION REPORT

The following list of current medical articles in mass-circulation magazines on medical subjects is published each week only for the information of readers of THE JOURNAL. *Unless specifically stated, the American Medical Association neither approves nor disapproves of the articles reported.*

MAGAZINES

Cosmopolitan, January, 1959

"Strength of Adversity," by Jane Collins

This is a heartwarming story about Bethel Schecbeck's determined approach to provide her permanently blind son with a normal life. In Tacoma, Wash., Bethel founded the Tacoma League for the Blind and persuaded the state legislature to permit her son to attend a public school.

"Canker Sore Cure," by Lawrence Galton

A Harvard physician has reported that Lactinex tablets, which contain a suspension of lactobacillus bacteria that ferment carbohydrates, "look like" an effective treatment for canker sores.

Consumer Bulletin, January, 1959

"Hearing Aids of the Eyeglass and Contour Types"

Eyeglass and contour hearing aids—their advantages, limitations, and costs—are discussed. The typical eyeglass-type hearing aid contains a four-transistor amplifier as well as a microphone and a receiver to deliver the amplified sound, all built into a small compartment within one of the side pieces of a pair of eyeglasses. The typical contour hearing aid also contains a transistor amplifier, microphone, and receiver, mounted in a small, crescent-shaped compartment.

Farm Journal, January, 1959

"How to Cure Worry," by Mary Ziegler

After interviewing many farmers, the author compiled the nine easiest ways to combat worry. As one farmer pointed out, "In many instances, a doctor can settle in an hour or so something you have lost sleep over for months."

Saturday Evening Post, Jan. 3, 1959

"The Priceless Gift of Speech," by Steven M. Spencer

At the Institute of Logopedics in Wichita, Kan., a staff of 176 is teaching individuals who are afflicted with cerebral palsy, aphasia, cleft palate, stuttering, and middle-aged victims of stroke to speak. Dr. Martin Palmer, founder and director of the institute, believes that a child with a speech defect is in special need of the widest possible variety of experiences and stimuli, things to do and things to talk about.

Look, Jan. 20, 1959

"The Epileptic," by Howard A. Rusk, M.D.

In this discussion of the barriers confronting epileptics, Dr. Pearce Bailey, director of the National Institute of Neurological Diseases and Blindness, is quoted as saying: "Epilepsy is the only common disorder where the sufferer is more handicapped by the attitude of society than by disability." However, such organizations as the National Epilepsy League, the United Epilepsy Association, and the Epilepsy Information Center are making much progress in changing the public's attitudes.

Redbook, January, 1959

"Why Our Baby Died," by Barbara Ellen Rogers

This is the story of a 9-week-old baby who supposedly suffocated to death and the ill effects this tragedy had upon the parents. Blaming themselves for their infant's death, the mother tells how she searched for more knowledge about sudden death in children. After doing much research, she concluded that "healthy babies don't suffocate."

TWO NEW PARAFLEX* PRODUCTS

FOR RHEUMATISM AND TRAUMATIC DISORDERS

PARAFON*

A SPECIFIC MUSCLE RELAXANT PLUS
A PREFERRED ANALGESIC

FOR ARTHRITIS

PARAFON* with PREDNISOLONE

Effective and well tolerated on the practical dosage of only 6 tablets daily.

PARAFON and PARAFON WITH PREDNISOLONE provide benefits that last for up to six hours.

PARAFON relieves pain, stiffness, and disability caused by rheumatism and traumatic disorders; PARAFON WITH PREDNISOLONE compounds this relief with anti-inflammatory action in treatment for arthritis.

supplied: PARAFON: Tablets, scored, pink, bottles of 50. Each tablet contains: PARAFLEX Chlorzoxazone† 125 mg.; and TYLENOL® Acetaminophen 300 mg.
PARAFON WITH PREDNISOLONE: Tablets, scored, buff colored, bottles of 36. Each tablet contains: PARAFLEX Chlorzoxazone 125 mg.; TYLENOL Acetaminophen 300 mg.; and prednisolone 1.0 mg.

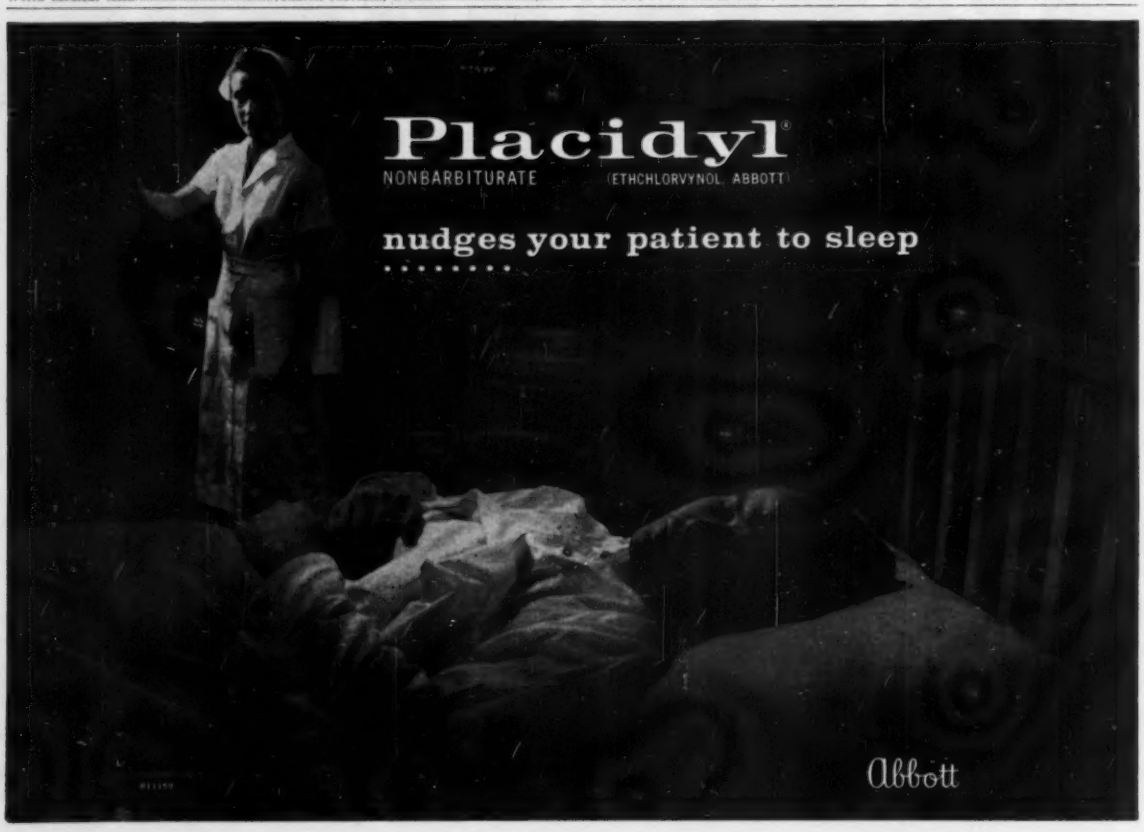
precautions: The precautions and contraindications that apply to all steroids should be kept in mind when prescribing PARAFON WITH PREDNISOLONE.

*TRADE MARKS †U.S. PATENT PENDING

McNEIL

McNeil Laboratories, Inc. • Philadelphia 32, Pa.

SOCIETY	PRESIDENT	SECRETARY	MEETING
American Public Health Association	Leona Baumgartner, New York City	Berwyn F. Mattison, 1790 Broadway, New York 19	Atlantic City, N. J., Oct. 19-23
Radium Society	Milford Schulz, Boston 14	Robert L. Brown, Robert Winship Clinic, Emory Univ., Atlanta, Ga.	Hot Springs, Va., Apr. 6-8
Rheumatism Assn.	James J. Bunim, Bethesda, Md.	Edward F. Hartung, 580 Park Ave., New York 21	Washington, D. C., June 2-4
Roentgen Ray Society	Barton R. Young, Philadelphia	C. Allen Good, 200 1st St., S.W., Rochester, Minn.	Cincinnati, Sept. 22-25
School Health Assn.	Delbert Oberteuffer, Columbus, Ohio	A. O. DeWeese, 515 E. Main St., Kent, Ohio	Atlantic City, N. J., Oct. 18-23
Society for Clinical Investigation	John A. Leutscher, Jr., San Francisco	S. J. Farber, 550 1st Ave., New York 16	Atlantic City, N. J., Apr. 13-18
Society for Experimental Pathology	W. B. Wartman, Chicago	J. F. A. McManus, Univ. of Ala. Med. Center, Birmingham, Ala.	Atlantic City, N. J., Apr. 15-17
Society for Pharm. & Ex. Ther.	Chauncey Leake, Columbus 10	Harold Hodge, Univ. of Rochester, Rochester 20, N. Y.	Atlantic City, N. J., Apr. 3-5
Society for the Study of Sterility	Sheldon Payne, Los Angeles 25	H. H. Thomas, 920 S. 19th St., Birmingham, Ala.	
Society of Anesthesiologists	Daniel C. Moore, Seattle 1	J. E. Remlinger, 802 Ashland Ave., Wilmette, Ill.	Bal Harbour, Fla., Oct. 5-9
Society of Biological Chemists	S. Ochoa, New York	Phillip Handler, Duke University, Durham, N. C.	
Society of Clinical Pathologists	Edward L. Burns, Toledo, Ohio	Mr. Claude E. Wells, 2052 N. Orleans, Chicago 14	Chicago, Sept. 7-11
Society of Maxillofacial Surgeons	F. S. Dunn, New York 21	Orion H. Stuteville, 700 N. Michigan Ave., Chicago 11	
Society of Plastic & Reconst. Surg.	Louis T. Byars, St. Louis 8	Thomas R. Broadbent, 508 E. S. Temple, Salt Lake City	Miami Beach, Fla., Oct. 18-23
Society of Tropical Medicine & Hygiene	Lewis W. Hackett, Berkeley, Calif.	G. B. Hill, 3575 St. Gaudens Rd., Miami 33, Fla.	Indianapolis, Oct. 28-31
Surgical Assn.	I. S. Ravdin, Philadelphia	W. A. Altemeier, Cincinnati Gen. Hosp., Cincinnati 29	Atlantic City, N. J., '59
Therapeutic Society	Tom D. Spies, Birmingham, Ala.	O. B. Hunter, Jr., 915 19th St., N.W., Washington, D. C.	Atlantic City, N. J., June 4-7
Trudeau Society	Daniel E. Jenkins, Houston, Tex.	E. P. K. Ferger, 1790 Broadway, New York 19	Atlantic City, N. J., Apr. 29-23
Urological Assn.	Adolph Kutzmann, Los Angeles 57	Samuel L. Raines, 186 S. Bellevue Blvd., Memphis, Tenn.	
Venereal Disease Assn.	Sidney Olansky, Durham, N. C.	S. R. Taggart, 1325 Upshur St., N.W., Wash., D. C.	Baltimore, Apr. 27-28
Veterinary Medical Assn.	R. E. Rebrassier, Columbus, Ohio	H. E. Kingman Jr., 600 S. Michigan Ave., Chicago 5	Kansas City, Mo., Aug. 24-28
Assn. for Research in Nervous & Ment. Dis.	Lee Eaton, Rochester, Minn.	Odollo J. Masselink, 700 W. 168th St., New York 32	
Assn. for Research in Ophthalmology	Hunter H. Romaine, New York 21	Lorand V. Johnson, 10515 Carnegie Ave., Cleveland 6	Atlantic City, N. J., June 8-12
Assn. of American Medical Colleges	John McK. Mitchell, Philadelphia	Richard H. Young, 2530 Ridge Ave., Evanston, Ill.	Chicago, Nov. 2-4
Assn. of American Physicians	Walter Bauer, New Haven 11, Conn.	P. B. Beeson, Yale U. Sch. of Med., New Haven 11, Conn.	Atlantic City, N. J., May 5-6
Assn. of Life Ins. Med. Dir. of America	Henry B. Kirkland, Newark, N. J.	Royal S. Schaaf, P. O. Box 594, Newark 1, N. J.	New York City, Oct. 21-23
Assn. of Medical Illustrators	Miss Kay Hyde, San Francisco 21	Miss Rose M. Reynolds, 42nd and Dewey Ave., Omaha 5	Seattle, Oct. 5-7
Assn. of Military Surgeons of U. S.	Brig. Gen. H. H. Twitchell, APO 633, New York City	R. E. Bitner, 1736 I St., N.W., Washington 6, D. C.	Washington, D. C., Nov. 8-11
Assn. of Public Health Phys.	Sanford P. Lehman, Seattle	Joseph M. Bistowish, P. O. Box 1117, Tallahassee, Fla.	
Assn. of State & Territorial Health Officers	D. G. Gill, Montgomery, Ala.	M. F. Shanholtz, State Office Bldg., Richmond, Va.	Washington, D. C.
Biological Photographic Assn.	Mr. Leo C. Massouist, Milwaukee	Miss J. Waters, Box 1668, Grand Central P. O., N. Y. 17	Montreal, Canada, Aug. 31-Sept. 3
Central Assn. of Ob. & Gyn.	Axel N. Arneson, St. Louis 8	Edwin J. DeCosta, 104 S. Michigan Ave., Chicago 3	Chicago, Sept. 24-26
Central Neuropsychiatric Assn.	Hamilton Ford, Galveston, Texas	R. M. Patterson, Ohio S. Univ. Col. of Med., Columbus 10, Ohio	New Orleans, Oct. 16-17
Central Society for Clinical Research	Edgar S. Gordon, Madison 6, Wis.	Austin S. Weisburger, 2065 Adelbert Rd., Cleveland 6	Chicago, Nov. 6-7
Central Surgical Assn.	William A. Altemeier, Cincinnati	A. D. McLachlin, Victoria Hosp., London, Ont., Canada	Montreal, Can., Feb. 19-21
Clinical Orthopaedic Society	Marcus J. Stewart, Memphis 3, Tenn.	Charles H. Frans, 1810 Wealthy St. S.E., Grand Rapids, Mich.	
College of American Pathologists	Charles P. Larson, Tacoma, Wash.	A. H. Dearing, Prudential Plaza, Suite 2115, Chicago 1	Chicago, Sept. 6
Gerontological Society	Mr. Louis Kuplan, Sacramento, Calif.	Robert W. Kleemeier, St. Louis	Detroit, Nov. 12-14
Industrial Medical Association	H. W. Lawrence, Cincinnati 17	Leonard Arling, 3101 Univ. Ave., S.E., Minneapolis 14	Chicago, Apr. 26-29
Interstate Postgrad. Med. Assn. of N. A.	Samuel Marshall, Boston	Erwin R. Schmidt, Box 1109, Madison 1, Wis.	Chicago, Nov. 2-5
Medical Library Assn.	Miss Isabelle Anderson, Denver	Mrs. H. T. Perkins, 333 Cedar St., New Haven 11, Conn.	
National Medical Assn.	R. Stillman Smith, Macon, Ga.	John T. Givens, 1108 Church St., Norfolk 10, Va.	Detroit, Aug. 10-13
National Multiple Sclerosis Society	Mr. Ralph C. Glock, New York	Mr. Donald Vail, 257 Fourth Ave., New York 19	New York, Mar. 9
National Proctologic Assn.	Peggy Cornet, Chicago Heights, Ill.	George E. Mueller, 59 E. Madison St., Chicago 2	Chicago, Nov. '59
National Tuberculosis Assn.	Mario Fischer, New York 16	Mrs. Wallace B. White, 1790 Broadway, New York 19	Chicago, May 24-29
Neurosurgical Society of America	Charles L. Neill, Jackson, Miss.	Miss Nettie Mehne, The Upjohn Co., Kalamazoo, Mich.	Toronto, Can., June 15-19
Radiological Society of North America	Laurence L. Robbins, Boston 14	D. S. Childs, 713 E. Genesee St., Syracuse 2, N. Y.	Chicago, Nov. 15-20
Society for Investigate Dermatology	Walter C. Lobitz Jr., Hanover, N.H.	Herman Beerman, 255 S. 17th St., Philadelphia 3	
Society for Pediatric Research	Sydney S. Gellis, Boston	Clark D. West, Children's Hosp., Cincinnati	Buck Hill Falls, Pa., May 8-9
Society for Vascular Surgery	Arthur H. Blakemore, New York 32	Henry Swan, 4200 East 9th Ave., Denver 20	
Society of American Bacteriologists	Harry Eagle, Bethesda, Md.	E. M. Foster, Univ. of Wisconsin, Madison 6, Wis.	St. Louis, May 10-15
Society of Biological Psychiatry	Joseph Wortis, Brooklyn, N. Y.	George N. Thompson, 2010 Wilshire Blvd., Los Angeles 57	Atlantic City, N. J., June 13-14
Society of Clinical Surgery	James Priestly, Rochester, Minn.	F. F. Albritten, Jr., Univ. of Kans., Kansas City, Kan.	
Society of Neurological Surgeons	Leonard T. Furlow, St. Louis 8	Bronson S. Ray, 525 E. 68th St., New York 21	New York, Apr. 27-28
Society of University Surgeons	C. Rollins Hanlon, St. Louis 4, Mo.	James Hardy, University Medical Center, Jackson, Miss.	Denver, Colo., Feb. 12-14
Southeastern Surgical Congress	Murray M. Copeland, Washington 7, D.C.	S. T. Beasley, 45 Edgewood Ave. S.E., Atlanta 3, Ga.	Miami Beach, Fla., Mar. 9-12
Southern Medical Assn.	Milford O. Rouse, Dallas 1, Texas	Mr. V. O. Foster, 2601 Highland Ave., Birmingham 5, Ala.	Atlanta, Ga., Nov. 16-19
Southern Surgical Assn.	James D. Rives, New Orleans 12, La.	George G. Finney, 2947 St. Paul St., Baltimore 18	
Southwestern Medical Assn.	Louis G. Jekel, Phoenix, Ariz.	Russell L. Deter, 1501 Arizona St., El Paso, Tex.	
Southwestern Surgical Congress	Lewis M. Overton, Albuquerque, N. M.	C. M. O'Leary, 1213 Med. Arts Bldg., Oklahoma City	Denver, Mar. 30-Apr. 1
Student American Medical Assn.	Mr. Carwile LeRoy, Chapel Hill, N. C.	Mr. Russell F. Staudacher, 430 N. Michigan, Chicago 11	Chicago, Apr. 30-May 3
The Endocrine Society	Leo T. Samuels, Salt Lake City	H. H. Turner, 1200 N. Walker St., Oklahoma City	
U. S. Section, Internat'l Coll. of Surgeons	Curtice Rosser, Dallas, Texas	Karl Meyer, 1516 Lake Shore Dr., Chicago	
Western Industrial Medical Assn.	Edward J. Zalk, Los Angeles 14	A. C. Remington, 9851 Sepulveda Blvd., Los Angeles 45	Los Angeles, Oct. 2-3
Western Orthopedic Assn.	William F. Stanek, Denver 6	Miss Vi Mathiesen, 354-21st St., Oakland 12, Calif.	Denver, Oct. 18-22
Western Society of Electro-Encephalography	Donald B. Lindsley, Los Angeles 24	Kenneth A. Blinn, 4120 Atlantic Ave., Long Beach, Calif.	
Western Surgical Assn.	James T. Priestley, Rochester, Minn.	John T. Reynolds, 612 N. Michigan Blvd., Chicago 11	Colorado Springs, Colo., Nov. 19-21
Woman's Auxiliary to the Am. Med. Assn.	Mrs. Paul C. Craig, Wyomissing, Pa.	Miss Margaret Wolfe, 535 N. Dearborn St., Chicago 10	
World Medical Assn.	Charles Jacobsen, Denmark	Louis H. Bauer, 10 Columbus Circle, New York 19	Montreal, Canada, Sept. 7-12



IN URTICARIA AND PRURITUS

VISTARIL*

HYDROXYZINE PAMOATE

A PSYCHOTHERAPEUTIC ANTIHISTAMINE

SPECIFIC ANTIHISTAMINIC ACTION in the treatment of a variety of skin disorders commonly seen in your practice.

"The most striking results were seen in those patients with chronic urticaria of undetermined etiology."[1]

PLUS

PSYCHOTHERAPEUTIC POTENCY for the relief of anxiety and tension.

The psychotherapeutic effectiveness of hydroxyzine (VISTARIL) was confirmed in a series of 479 patients suffering from a wide variety of dermatoses, including atopic dermatitis, neurodermatitis, psoriasis, lichen planus, nummular eczema, dyshidrosis, pruritus ani and vulvae, and rosacea. "Adverse reactions were minimal."[2]

RECOMMENDED ORAL DOSAGE: *50 mg. q.i.d. initially; adjust according to individual response.*

VISTARIL Capsules: *25 mg., 50 mg., 100 mg.*

VISTARIL Parenteral Solution: *10 cc. vials and 2 cc. Steraject® Cartridges. Each cc. contains 25 mg. hydroxyzine (as the HCl).*

More than a tranquilizer

REFERENCES:
1. Feinberg, A. R., et al.: J. Allergy *29*:358 (July) 1958.
2. Robinson, H. M., et al.: So. Med. J. *50*:1282 (Oct.) 1957.

Pfizer *Science for the world's well-being*

PFIZER LABORATORIES *Division, Chas. Pfizer & Co., Inc., Brooklyn 6, N. Y.* *Trademark

an important problem in today's living...

alcoholism

The following articles from TODAY'S HEALTH are now available in pamphlet form.

ALCOHOLISM IS A DISEASE. A discussion by the Chairman of the A.M.A. Committee on Alcoholism. by Marvin A. Block, M.D., 8 pages, 15 cents.
I AM THE WIDOW OF AN ALCOHOLIC. Three articles combined. by Virginia Conroy, 16 pages, 20 cents.
HOW EXPERTS MEASURE DRUNKENNESS. A partial transcript of an actual courtroom case. by H. A. Heise, 8 pages, 15 cents.
BARBITURATES, BOOZE AND OBITUARIES. A discussion of the dangers of mixing alcohol and barbiturates. by Donald A. Dukelow, 4 pages, 10 cents.
TWELVE STEPS FOR ALCOHOLICS. A frank discussion of the meaning of an alcoholic behavior. by Richard Lake, 6 pages, 10 cents.

• • • • • • • • • • • • • • • • • •

These articles are available in one pamphlet for 50c ...

ALCOHOLICS ANONYMOUS. Written from the standpoint of a member, the basic treatment procedures are described and the psychological problems confronting the alcoholic are discussed.
ALCOHOL AND CIRRHOSIS OF THE LIVER. Relationship between alcohol, diet and cirrhosis. Increasing stress on nutritional differences. by Russell S. Boles.
HOW TO HELP A PROBLEM DRINKER. Understanding the alcoholic's capabilities, the necessity of help, causes of his condition. by Edward A. Strecker and Francis T. Chambers, Jr.
THE TREATMENT OF ALCOHOLISM. Tracing the steps from convincing the alcoholic that he is sick through treatment and cure. by Lewis Inman Sharp.
CONDITIONED REFLEX TREATMENT OF CHRONIC ALCOHOLISM. Its place among methods of treatment today, its development and correlation with personality factors. by Walter L. Voegtlin.
INSTITUTIONAL FACILITIES FOR THE TREATMENT OF ALCOHOLISM. Comparative differences, in drinking, with the last century, new establishments and methods of treatment, lack of trained personnel. by E. H. L. Corwin.

ADDRESS REQUESTS TO
ORDER DEPARTMENT
AMERICAN MEDICAL ASSOCIATION
535 N. DEARBORN ST., CHICAGO 10, ILLINOIS

"The hospital needs gowns so badly they can't afford to be choosy."

"Not for me—I wanted the sleeping pill for that woman across the hall!"

ACIDTYPES *from the Gelusil Family Album* — FATHER

Father knew only two ways to do a thing: his way and the wrong way. He was principled, positive . . . and often dyspeptic.

He and the years have passed but his heirs-in-spirit carry on his hard-driving tradition. Gastric hyperacidity is no stranger to them, either. Today, however, you can provide lastingly effective symptomatic relief with pleasant-tasting Gelusil . . . an antacid adsorbent Father should have had.

Especially important to your hospitalized patients . . . Gelusil is all antacid in action . . . contains no laxative . . . does not constipate. Prescribe Gelusil, a choice of modern physicians for every antacid need.

Formula: Each tablet or teaspoonful contains:
Aluminum hydroxide (Warner-Chilcott) 4 gr.
Magnesium trisilicate (U.S.P.) 7½ gr.

GELUSIL®
antacid adsorbent

WARNER CHILCOTT
MORRIS PLAINS, N.J.

therapeutic sulfa ⊕ levels

Midicel®

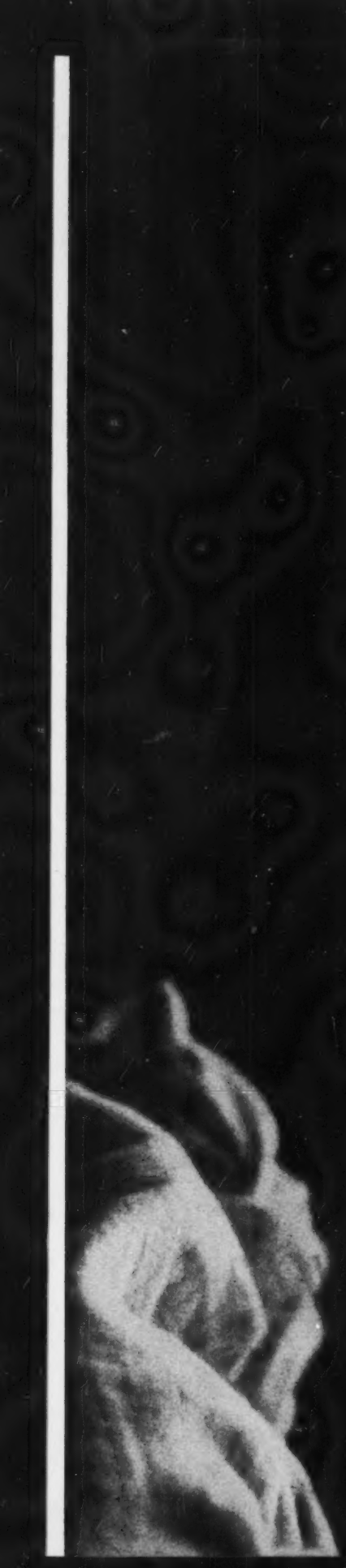
(sulfamethoxypyridazine, Parke-Davis)

for 24 hours with a single tablet

MIDICEL differs from older sulfonamides because it affords *all* these clinical advantages: ***1 tablet-a-day schedule***—greater convenience and economy for patients • ***rapid effect***—prompt absorption • ***prolonged action***—effective plasma and tissue concentrations sustained day and night with 1 tablet daily • ***wide antibacterial spectrum***—effective in urinary tract infections, upper respiratory infections, bacillary dysenteries, and surgical and soft tissue infections, due to sulfonamide-sensitive organisms • ***well tolerated***—low dosage and high solubility minimize possibility of crystalluria

Adult Dosage: Initial (first day)—2 tablets (1 Gm.) for mild or moderate infections, or 4 tablets (2 Gm.) for severe infections. Maintenance—1 tablet (0.5 Gm.) daily. ***Children's Dosage:*** According to weight. See literature for details of dosage and administration. ***Available:*** Quarter-scored tablets of 0.5 Gm., bottles of 24, 100, and 1,000.

PARKE, DAVIS & COMPANY • DETROIT 32, MICHIGAN



Iron deficiency anemia of pregnancy is a consequence of depleted iron stores.[1] It may take many months or years to rebuild these stores with oral iron.[2,3]

Imferon

INTRAMUSCULAR IRON-DEXTRAN COMPLEX

Intramuscular injections of IMFERON can be relied on for rapid hematologic and clinical improvement, even in severely anemic women first seen late in pregnancy.[4,5]

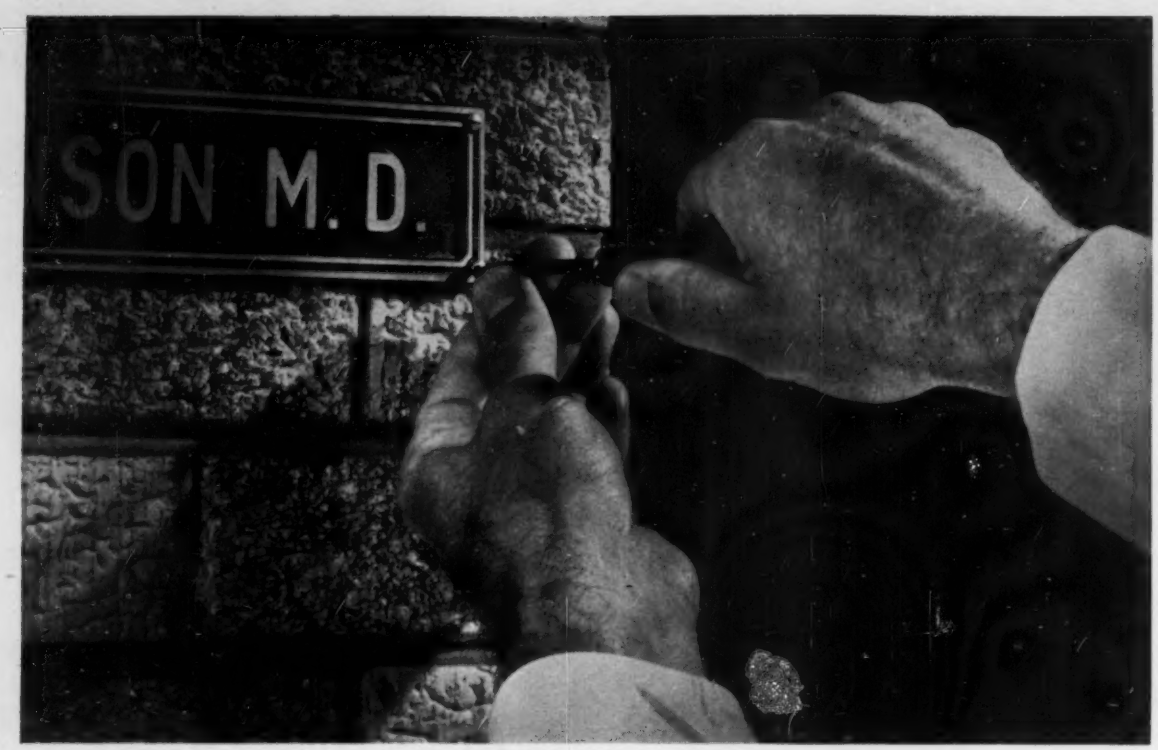
(1) Hagedorn, A. B.: M. Clin. North America, Philadelphia, W. B. Saunders Company (July) 1956, p. 983. (2) Stevens, A. R., Jr.: A.M.A. Arch. Int. Med. **98**:550, 1956. (3) Coleman, D. H., Stevens, A. R., Jr., and Finch, C. A.: Blood **10**:567, 1955. (4) Scott, J. M.: Brit. M. J. **2**:635 (Sept. 15) 1956. (5) Jennison, R. F., and Ellis, H. R.: Lancet **2**:1245 (Dec. 18) 1954.

Supplied: 2-cc. and 5-cc. ampuls, boxes of 4. Physician's directions in every box. There are 50 mg. of elemental iron per cc. Request Brochure NDA 17, Imferon.

IMFERON® is distributed by Lakeside Laboratories, Inc., under license from Benger Laboratories, Limited.

LAKESIDE

21059



Another sign of better health for all is BLUE SHIELD®!

AMONG a community's most valuable assets are its doctors. With today's great advances in medicine and surgery, they are helping more and more people live longer, happier and more useful lives.

And, in addition to their professional services, most doctors are doing still more. Through cooperation with local Blue Shield Plans, they are helping millions of people budget the cost of surgical-medical-maternity care.

Doctors helped create the Blue Shield program out of a deep sense of responsibility to their fellow men. They supported it as a voluntary, free-enterprise concept.

Doctors continue to guide Blue Shield Plans through their local medical societies. Benefits are kept realistic, yet at the same time Blue Shield membership costs are held low—within the reach of almost every employed person.

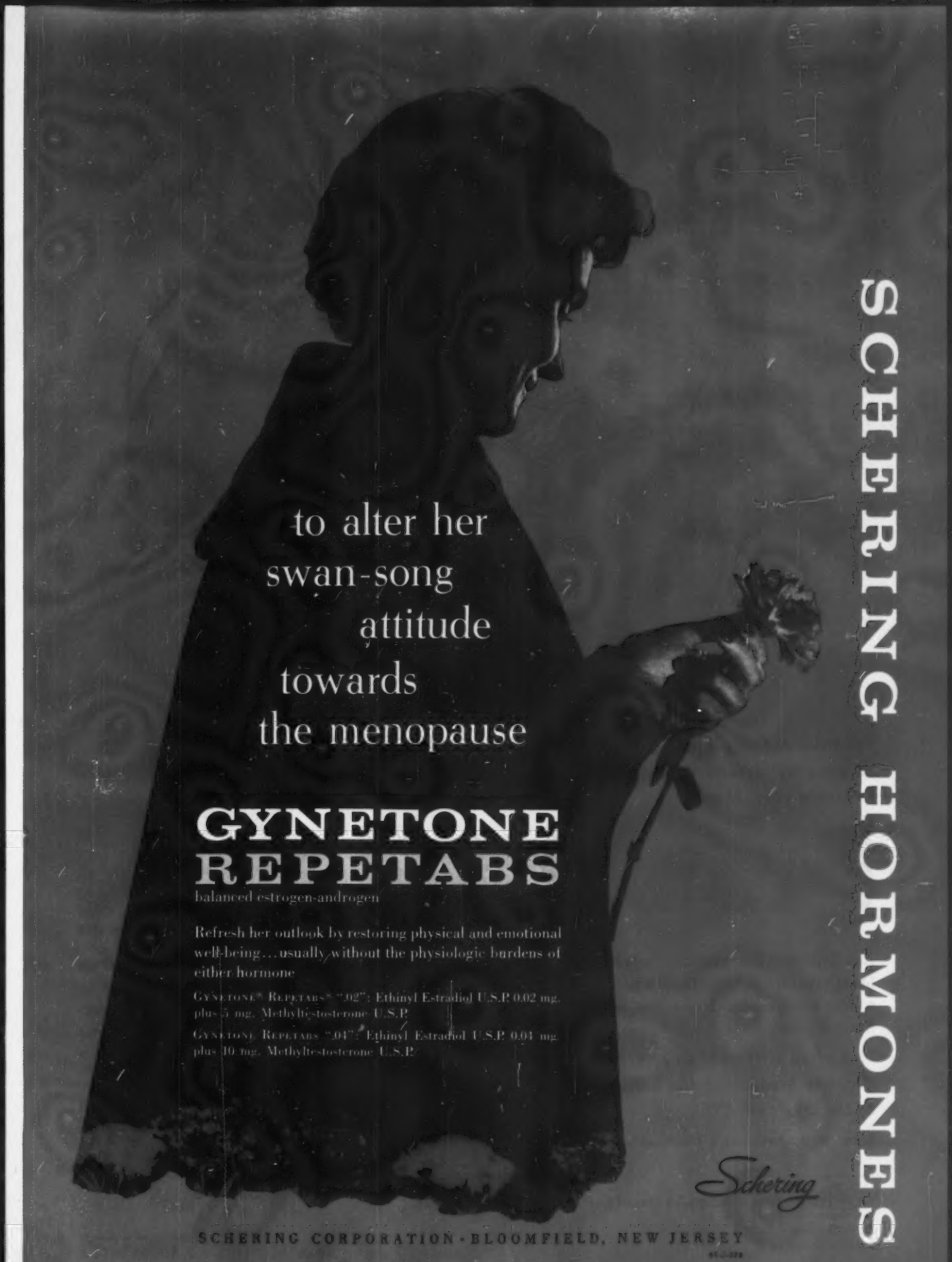
Except for necessary operating expenses and reserves, every cent paid in to Blue Shield goes toward helping to pay members' doctor bills. An average of five million dollars weekly is paid to doctors for their care of patients who are protected by Blue Shield.

Your local Blue Shield Plan exists for the sole purpose of helping you and your patients. It can be as important in your practice as you choose to make it.

BLUE SHIELD®

Like a partnership of doctor and patient

®Service marks registered by
Blue Shield Medical Care Plans


to alter her
swan-song
attitude
towards
the menopause
GYNETONE
REPETABS
balanced estrogen-androgen
Refresh her outlook by restoring physical and emotional well-being... usually without the physiologic burdens of either hormone
GYNETONE® REPETABS® ".02": Ethinyl Estradiol U.S.P. 0.02 mg. plus 5 mg. Methyltestosterone U.S.P.
GYNETONE REPETABS ".04": Ethinyl Estradiol U.S.P. 0.04 mg. plus 10 mg. Methyltestosterone U.S.P.
Schering
SCHERING CORPORATION · BLOOMFIELD, NEW JERSEY
SCHERING HORMONES

help reduce
the pressures
IN your
patients

help reduce
the pressures
ON your
patients

for total management
of your hypertensive
patients rely upon

RAUDIXIN

Squibb Whole Root Rauwolfia Serpentina

Raudixin provides gradual, sustained lowering of blood pressure in hypertensive patients, as well as a mild bradycardia. Hence, the work load of the heart is reduced.

"... often preferred to reserpine in private practice because of the additional activity of the whole root."

Corrin, K. M.: Am. Pract. & Dig. Treatment 8:721 (May) 1957.

Tranquilizing Raudixin helps relax the anxious hypertensive patient so that he is better able to cope with external pressures without being overwhelmed by them. By reducing these anxieties and tensions, Raudixin helps break the mental tension —hypertension cycle.

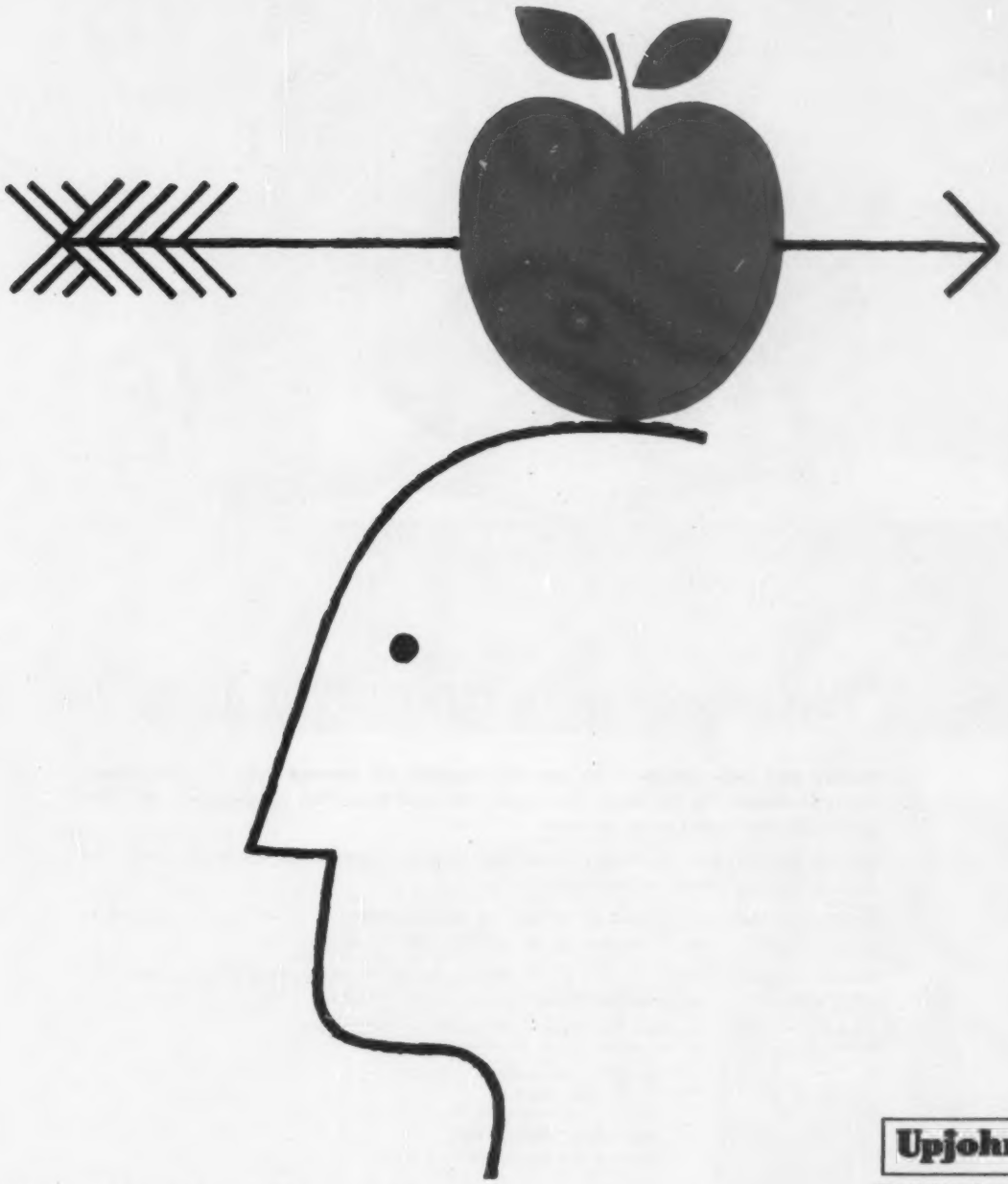
Dosage: Two 100 mg. tablets once daily; may be adjusted within range of 50 to 300 mg. *Supply:* 50 and 100 mg. tablets. Bottles of 100, 1000 and 5000.

SQUIBB *Squibb Quality—the Priceless Ingredient*

RAUDIXIN® IS A SQUIBB TRADEMARK

Medrol*

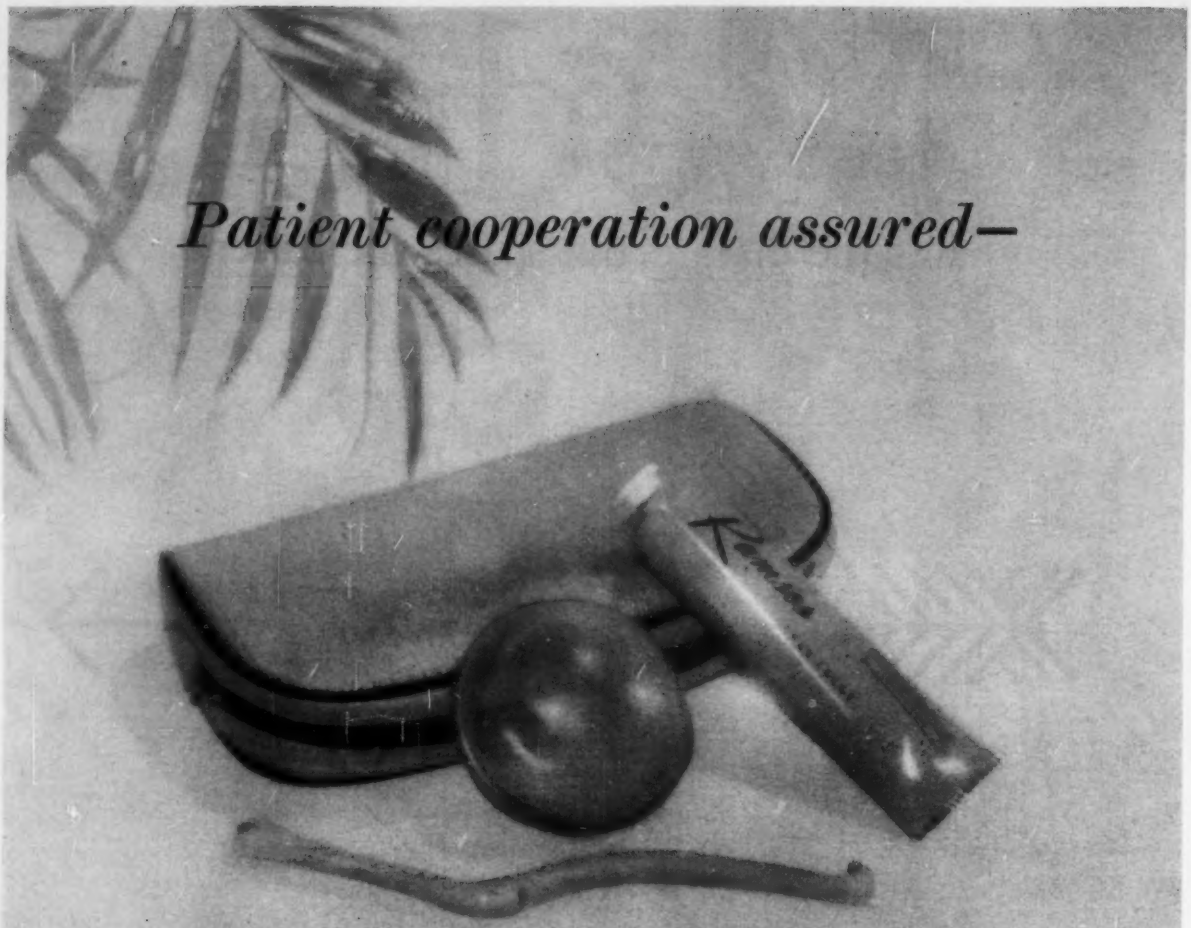
hits the disease, but spares the patient



Upjohn

The Upjohn Company
Kalamazoo, Michigan

*Trademark for methylprednisolone, Upjohn



Patient cooperation assured—

when you prescribe the new RAMSES® "Tuk-A-Way"® Kit (no.701)

Beauty and convenience — the new kit, designed for feminine appeal, is attractively finished, compact for traveling. The zipper now runs across the top and down the side, providing easier access to the contents.

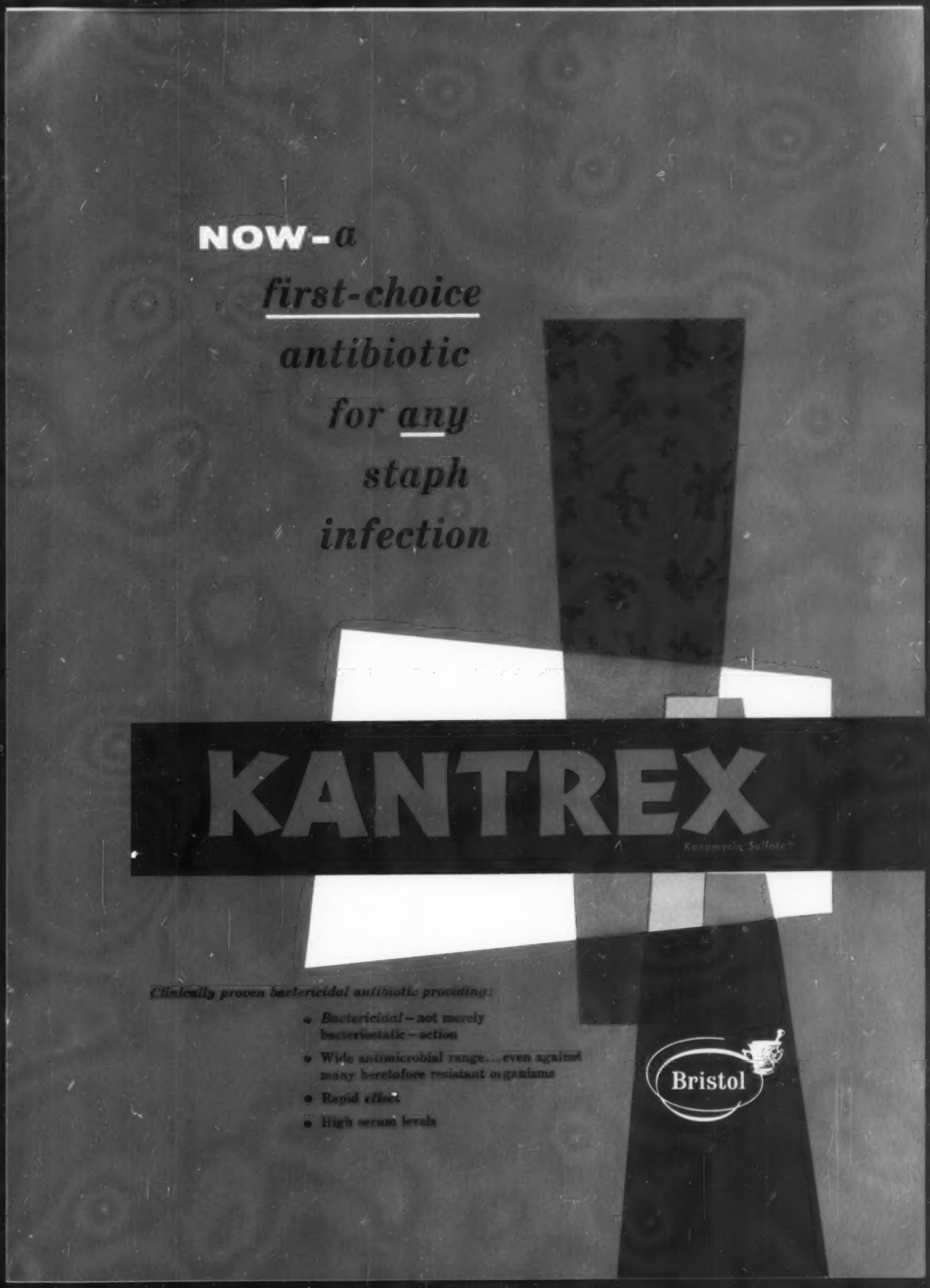
Ramses Diaphragm —cushioned comfort and optimal protection are ensured by the unique flexible rim, the strong, velvet-smooth dome.

Ramses Introducer — curved to conform to vaginal contours, smoothed and rounded to protect delicate tissue. Facilitates quick, accurate placement, easy removal.

Ramses Vaginal Jelly * — *10-hour protection* is provided by this nonirritating spermatocide. Well tolerated for continued use, cannot impair future fertility.

*Active agent, dodecaethyleneglycol monolaurate 5% in a base of long-lasting barrier effectiveness.
RAMSES and "TUK-A-WAY" are registered trade-marks of Julius Schmid, Inc.

75 *th anniversary*
1883-1958
service to the medical and drug professions
JULIUS SCHMID, INC.
423 West 55th Street, New York 19, N. Y.


NOW-a
first-choice
antibiotic
for any
staph
infection
KANTREX
Kanamycin Sulfate
Clinically proven bactericidal antibiotic providing:
• Bactericidal – not merely bacteriostatic – action
• Wide antimicrobial range... even against many heretofore resistant organisms
• Rapid effect
• High serum levels
Bristol

For rapid bactericidal action in any staph infection...

KANTREX®

Kanamycin Sulfate

"The rapidity with which bacteria are killed by this agent (KANTREX) is reflected by the promptness of the clinical response."[11]

SUMMARY OF CLINICAL RESULTS WITH INTRAMUSCULAR KANTREX —

DISEASE	NUMBER OF PATIENTS	GOOD RESULTS	FAIR RESULTS	POOR OR NEGATIVE RESULTS	NO IMPROVEMENT
Respiratory tract disease	77	55	6	4	12
Urinary tract disease	294	140	—	3	31
Soft tissue infections	177	160	5	4	16
Septicemia	30	15	2	1	9
Osteomyelitis	13	9	—	1	3
Bacterial endocarditis	8	4	3	—	1
Miscellaneous disease	40	30	6	1	3

— IN 559 CASES REPORTED BY 31 INVESTIGATORS

Indications: Indications for KANTREX include infections due to kanamycin-susceptible organisms, even many of those resistant to other antibiotics:

Respiratory tract infections: Tracheitis, bronchitis, pneumonitis, bronchopneumonia, lung abscess, pleuritis, empyema, and bronchiectasis.

Urinary tract infections: Acute and chronic pyelonephritis, and cystitis.

Soft tissue infections: Wound infections, abscesses, cellulitis.

Blood stream infections.

Osteomyelitis.

Dosage: Adults: Average daily intramuscular dose 1 to 2 Gm. in 2 to 4 equally divided doses.

Children: Average daily intramuscular dose 15 to 30 mg. per Kg. in 2 to 4 equally divided doses.

Precaution:

Skin eruptions and signs of renal irritation (which disappeared on cessation of therapy) have been occasionally noted. In a few cases, signs of eighth nerve dysfunction (tinnitus, vertigo, loss of hearing) have been observed: (1) in patients with pre-existing renal insufficiency, (2) in patients receiving 18 Gm. or more of KANTREX, and (3) in patients over 45 years of age. Animal studies indicate that KANTREX has less auditory toxic potential than dihydrostreptomycin.

Supply: Available in rubber-capped vials as a ready-to-use sterile aqueous solution in two concentrations (stable at room temperature indefinitely):

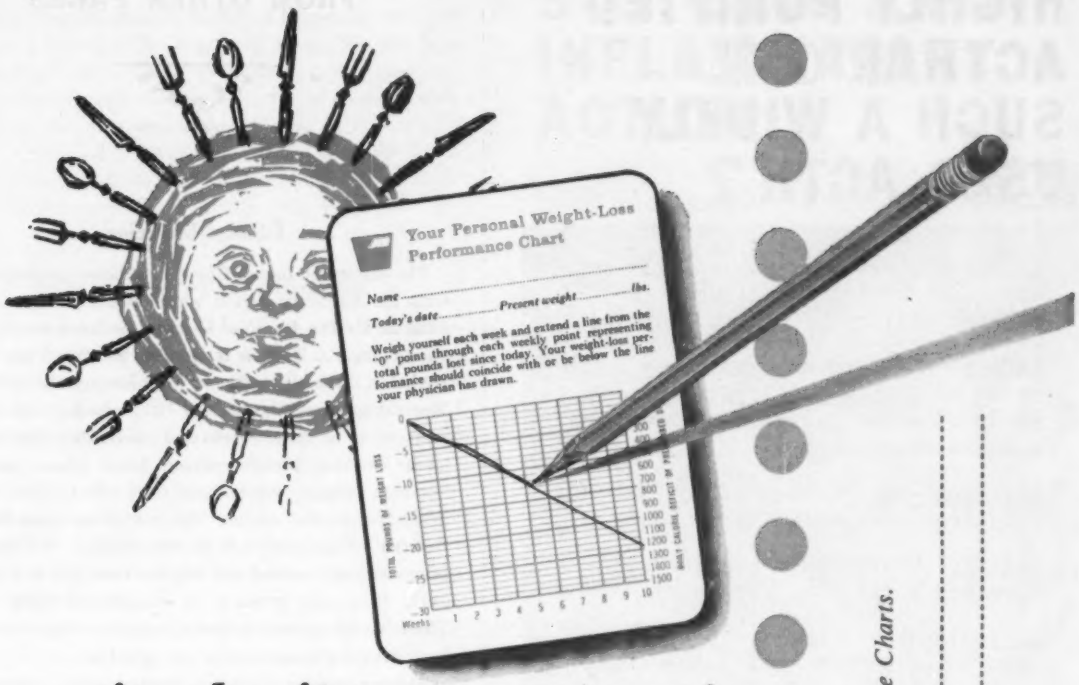
KANTREX (kanamycin sulfate) 0.5 Gm. in 2 ml. volume.

KANTREX (kanamycin sulfate) 1.0 Gm. in 3 ml. volume.

Kantrex Sensitivity Discs and comprehensive literature available on request.

References: 1. Bunn, P., Baltch, A., and Krajnyak, O., State University of New York Upstate Medical School, Syracuse, N.Y.: Annals N.Y. Acad. Sci. In press. 2. Cronk, G. A., and Naumann, D. E., Dept. of Health and Preventive Medicine, Syracuse University, Syracuse, N. Y. *Ibid.* 3. Davies, F. G., Marcy State Hospital, Marcy, N.Y. *Ibid.* 4. Dube, A. H., Edward S. Van Duyn Memorial County Hospital, Onondaga, N.Y. *Ibid.* 5. Finegold, S. M., Winfield, M. E., Aronsohn, R. B., Hewitt, W. L., and Guze, L. B., University of California Medical School, Los Angeles, Calif. *Ibid.* 6. Greey, P. H., and Wightman, K. J. R., University of Toronto, Toronto, Can. *Ibid.* 7. Herrold, R. D., and Karabatsos, N., College of Medicine, University of Illinois, Chicago. *Ibid.* 8. High, R. H., Sarria, A., and Huang, N. N., Temple University School of Medicine, Philadelphia. *Ibid.* 9. Ichikawa, T., Medical Faculty, University of Tokyo, Tokyo, Japan. *Ibid.* 10. Katz, S., District of Columbia General Hospital, Washington, D.C.: Personal communication. 11. Rutenburg, A. M., Koota, G. M., and Schweinburg, F. B., Harvard Medical School, Boston: Annals N.Y. Acad. Sci. In press. 12. Ruiz Sanchez, F., and Ruiz Sanchez, A., University of Guadalajara, Jalisco, Mexico. *Ibid.* 13. White, A., and Knight, V., School of Medicine, Vanderbilt University, Nashville, Tenn. *Ibid.* 14. Yow, E. M., and Monson, O. T., Baylor University College of Medicine, Houston, Tex. *Ibid.* 15. Yow, M. E., and Womack, G. K., Baylor University College of Medicine, Houston, Tex. *Ibid.*

Bristol LABORATORIES INC.
SYRACUSE, NEW YORK


Your Personal Weight-Loss Performance Chart
Name
Present weight
lbs.
Today's date
Weigh yourself each week and extend a line from the "0" point through each weekly point representing total pounds lost since today. Your weight-loss performance should coincide with or be below the line your physician has drawn.
Weeks

in obesity management ...the incentive plan

YOUR PATIENT CHARTS HIS OWN PERFORMANCE LINE against your PREDICTION LINE

In giving each patient his ten-week chart of predicted weight-loss, you provide weekly goals as incentives for adhering strictly to your prescribed diet.

As the patient records his weight-loss performance week by week on the same chart, he experiences the satisfaction of achieving these goals you have set. And, equally important, he quickly sees the consequences of caloric overindulgence.

Each packet of ten charts includes a calorie nomogram – a time-saver in determining predicted weight-loss on the reducing diet you prescribe.

Exclusively for physicians – A professional service of the

Florida Citrus Commission

Lakeland, Florida

Florida Citrus Commission • Lakeland, Florida

Please send me complimentary packet of ten Weight-Loss Performance Charts.

Name.....

Address.....

City.....*Zone*.....*State*.....

WHY IS HIGHLY PURIFIED ACTHAR® GEL SUCH A WIDELY USED ACTH?

Experience—Most extensive clinical and experimental background; longest history of use in practice.

Safety—A record of over seven years of Continuous Treatment in a group of eight patients; no serious side effects noted.

Efficacy—Rapid onset of action—effects sustained up to 72 hours.

Quality—Unsurpassed standardization and purity.

Convenience—As easily injected as insulin—fluid at room temperature.

Selected Conditions for Short-term and Office Therapy

Asthma—Bursitis, Tenosynovitis—Dermatitis (contact, drug, etc.)—Eye Diseases (acute, inflammatory)—Gout—Hyperemesis Gravidarum—Penicillin Reactions, Serum Sickness, Urticaria.

ARMOUR

Highly Purified ACTHAR *Gel* is the Armour Pharmaceutical Company brand of purified repository corticotropin—(ACTH)

Supplied: 5 cc. vials of 20, 40, 80 U.S.P. Units per cc. Also in a disposable syringe form, in a potency of 40 U.S.P. Units per cc.

ARMOUR PHARMACEUTICAL COMPANY • KANKAKEE, ILLINOIS
a leader in biochemical research

FROM OTHER PAGES

Chinese Medicine

The history of formal Chinese medicine properly begins with the legendary period which extended from 2697 to 1122 B. C. The father of Chinese medicine was Emperor Shen Nung. . . . To him is ascribed the Pen T'sao or The Herbal. . . . The three-volume work enumerated 365 drugs. These drugs were classified as 120 "superior," which were supposed to be nonpoisonous and rejuvenative and could be taken for long periods without harm. There were 120 "medium" drugs, said to have tonic effects, their toxicity depending on the dosage. The last group comprised 125 "inferior" drugs used only to cure disease. This book has been constantly revised and was last reprinted in English in 1911. It has now grown to 52 volumes with 8,160 recipes. The table of contents includes items from tiger bones and bat's dung to chaulmoogra oil and ephedrine.

Another eminent physician of the legendary period was Huang Ti (2689 to 2598 B. C.). He was called the Yellow Emperor and to him was attributed Nei Ching or Classic of Internal Medicine, the oldest medical book known to man. . . .

According to Chinese philosophy, the dual forces of Yang and Yin—light and dark, life and death, male and female—are not really separate in man but are in complicated balance. For example: the skin or surface is Yang, the interior is Yin; the empty organs are Yang, the solid organs are Yin. The back is Yang, the lung is Yin—a Yin within a Yang. A disease is Yang when it is due to external causes and Yin when due to internal causes.

Yang and Yin are in a constant state of flux in the body; perfect harmony means health, disharmony brings disease. The Chinese believed there are 12 main ducts carrying these vital forces, paired bilaterally, symmetrical and usually deeply imbedded in the muscles. Some of the routes are: from the little toe to the root of the tongue . . . from the heart to the inside of the little finger . . . from the hairy spots on the big toes to the vertex of the head. . . . These ducts rise to the surface at 365 points on the body. After a disease was diagnosed, the doctor would use acupuncture at these points to let the evil air out and restore the proper balance of Yang and Yin.

Acupuncture is an ancient Chinese method of therapy in which needles, 3 to 24 cm. long are placed in the flesh either manually or with the aid of a light mallet. The physician introduces these needles during inspiration, rotates them, then withdraws at expiration. . . . Another method of therapy still in vogue is moxa. This involves placing small cones of combustible material on the skin directly over the diseased organ and igniting them. The patient remains

immobile until these have finished burning. A blister and later a scar are formed on the skin. Favorite sites for moxibustion are the abdomen, back and pre-auricular areas of the face. The Chinese were fascinated by numbers and used them as a framework for their body image. The 365 drugs of the Pen T'sao and the 365 points for acupuncture correspond to the number of days in a year, while the 12 main vessels for the transport of Yang and Yin are the 12 great rivers of China.—J. D. Waye, M.D., From the Little Toe to the Root of the Tongue: A Short Account of Chinese Medicine, *The Boston Medical Quarterly*, June, 1958.

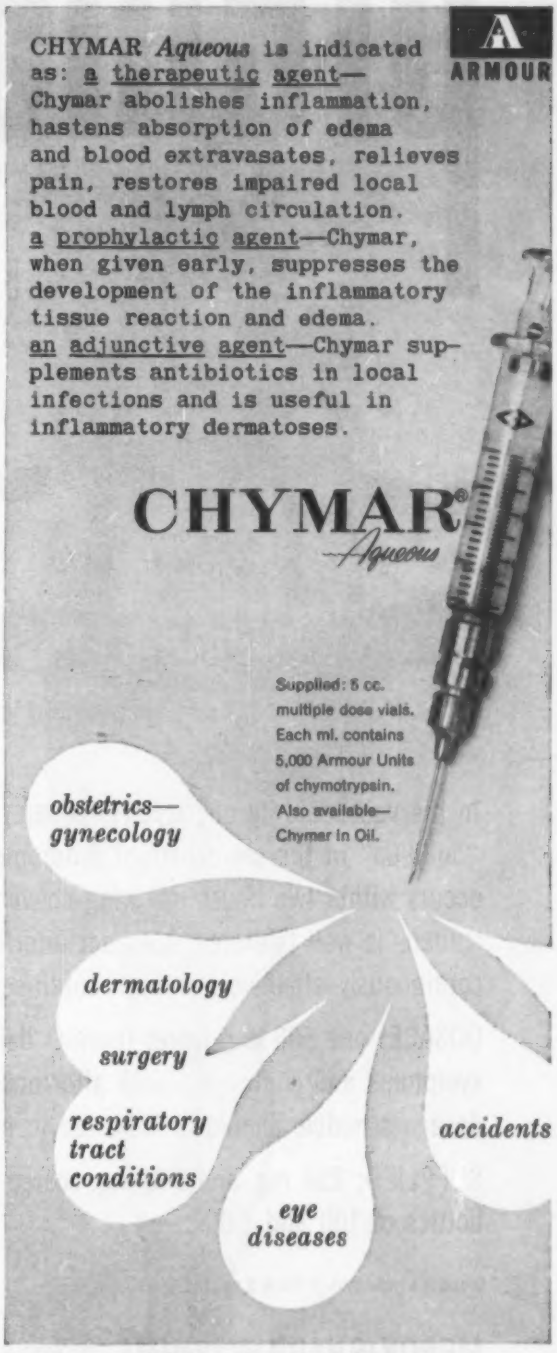
A Nail Found Within a Hen's Egg

On the morning of January 1, 1957, we sat down together for breakfast; one of us removed the shell from the blunt of her four-and-one-half-minute egg and added salt and pepper to the exposed albumin. A moment later my wife and I looked with amazement at an object which she had removed from her mouth under the impression that it was a bit of shell. This object was a sharp, clean nail of the type frequently known as a brad about 1.5 cm. long. While it is not impossible to state precisely in which layer of albumin the nail occurred, it undoubtedly lay in the chalaza fairly close to the shell membrane.

As a biologist only moderately familiar with the idiosyncrasies of the avian egg, the other author immediately examined the possibility that the nail was not in the egg before the partial removal of the shell; this in spite of the fact that the entire operation had been performed under his casual but direct observation. Since no grounds for accepting such a possibility were discovered, our next step was to examine the literature for a precedent.

Apart from inclusions of endogenous origin, for example, blood clots, bits of ovary, concretions, small eggs or remnants of broken eggs, quite a number of objects of environmental origin are recorded as having been observed within the hen's egg; for example, flukes, roundworms and insects; feathers, horsehair and faecal matter; sand pebbles and even a coffee bean. Many of these were described by Bonnett and are included in the brief discussion given by Romanoff and Romanoff. However, the only object at all similar to the one described here was observed about 275 years ago by Perrault. This object was a metal pin in the shape of a frog's thigh bone; under a whitish crust, it was black and slightly rusted. Perrault was of the opinion that the pin reached the egg after having penetrated the intestinal and oviducal walls. Romanoff and Romanoff suggest that "inanimate foreign bodies of extraneous origin are probably picked up when part of the hen's oviduct is everted as an egg is laid, and are then passed up the oviduct by means of antiperistaltic contractions." Essentially the same explanation is offered by Bonnett.

How our particular nail entered the egg we leave to the speculations of biologists more schooled in such matters, although of the two possibilities listed above we must admit some bias in favour of the earlier one by Perrault.—H. Kirkman, and G. T. Kirkman, Letters to the Editor, A Nail Found Within a Hen's Egg, *Nature*, April 19, 1958.


UNEXCELLED FOR SYSTEMIC ANTI-INFLAMMATORY ACTION
CHYMAR Aqueous is indicated as: a therapeutic agent—Chymar abolishes inflammation, hastens absorption of edema and blood extravasates, relieves pain, restores impaired local blood and lymph circulation.
a prophylactic agent—Chymar, when given early, suppresses the development of the inflammatory tissue reaction and edema.
an adjunctive agent—Chymar supplements antibiotics in local infections and is useful in inflammatory dermatoses.
ARMOUR
CHYMAR® Aqueous
Supplied: 5 cc. multiple dose vials. Each ml. contains 5,000 Armour Units of chymotrypsin. Also available—Chymar in Oil.
obstetrics—gynecology
dermatology
surgery
respiratory tract conditions
eye diseases
accidents
ARMOUR PHARMACEUTICAL COMPANY • KANKAKEE, ILLINOIS
a leader in biochemical research

premenstrual

'DIURIL'

(CHLOROTHIAZIDE)

In the vast majority of patients, 'DIURIL' relieves or prevents the fluid "build-up" of the premenstrual syndrome. The onset of relief often occurs within two hours following convenient, oral, once-a-day dosage. 'DIURIL' is well tolerated, does not interfere with hormonal balance and is continuously effective—even on continued daily administration.

DOSAGE: one 500 mg. tablet 'DIURIL' daily—beginning the first morning of symptoms and continuing until after onset of menses. For optimal therapy, dosage schedule should be adjusted to meet the needs of the individual patient.

SUPPLIED: 250 mg. and 500 mg. scored tablets 'DIURIL' (chlorothiazide); bottles of 100 and 1,000.

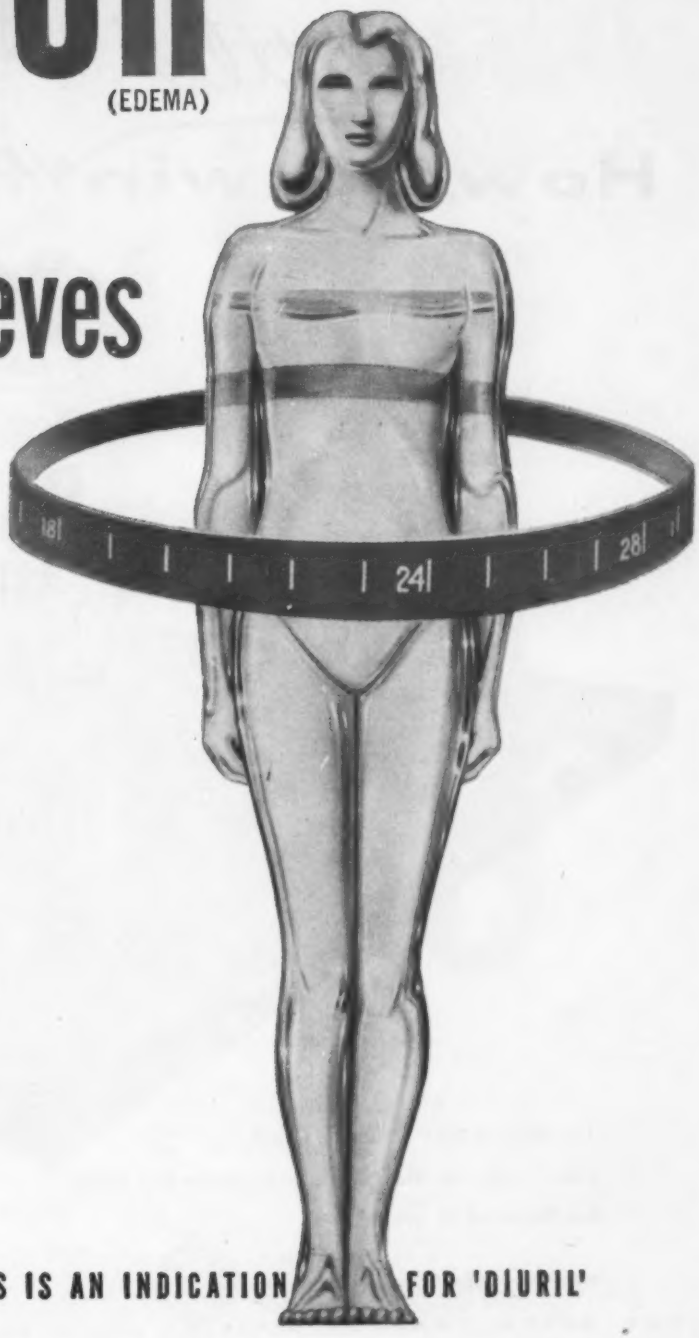
DIURIL is a trade-mark of Merck & Co., Inc.

MERCK SHARP & DOHME Division of MERCK & CO., INC., Philadelphia 1, Pa. MSD

tension

(EDEMA)

quickly relieves
Distress
Distention
Discomfort



ANY INDICATION FOR DIURESIS IS AN INDICATION FOR 'DIURIL'

little How to win friends ...

The Aspirin that Tastes So Good.

The Flavor Remains Stable down to the last tablet.

25¢ Bottle of 48 tablets.

We will be pleased to send samples on request.

THE BAYER COMPANY DIVISION of Sterling Drug Inc. 1450 Broadway, New York 18, N. Y.

Antivert® stops

VERTIGO

Each ANTIVERT *tablet contains:*

Meclizine (12.5 mg.)—effective antihistaminic to control vestibular dysfunction.[1]

Nicotinic acid (50 mg.)—a drug of choice for prompt vasodilation.[2,3]

Advantage of "dual therapy" confirmed:

Menger found ANTIVERT "improved or controlled symptoms in virtually 90% of vertiginous patients."[2]

Indications: Meniere's syndrome, arteriosclerotic vertigo, labyrinthitis, and streptomycin toxicity. Also effective in certain recurrent headaches, including migraine.

Dosage: one tablet before each meal.

Supplied: bottles of 100 blue-and-white scored tablets. Prescription only.

References: 1. Charles, C. M.: Geriatrics *2*:110 (March) 1956. 2. Menger, H. C.: Clin. Med. *4*:313 (March) 1957. 3. Shuster, B. H.: M. Clin. North America *40*:1787 (Nov.) 1956.

New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the world's well-being

HELPFUL
PAMPHLETS
FOR
BAFFLED
PARENTS

ALL ABOUT
BABIES

CALLING ALL PARENTS

A delightful booklet where babies do the talking through pictures and captions. 36 pages, 25 cents

WHAT DOES YOUR BABY PUT IN HIS MOUTH?

Tells how to prevent accidents from choking and what to do if they happen. by Chevalier Jackson and Chevalier L. Jackson. 24 pages, 15 cents

BAD HABITS IN GOOD BABIES

Including sleep disturbances, eating problems, stubbornness, bladder control. by H. M. Jahr, 16 pages, 20 cents

THUMBSUCKING

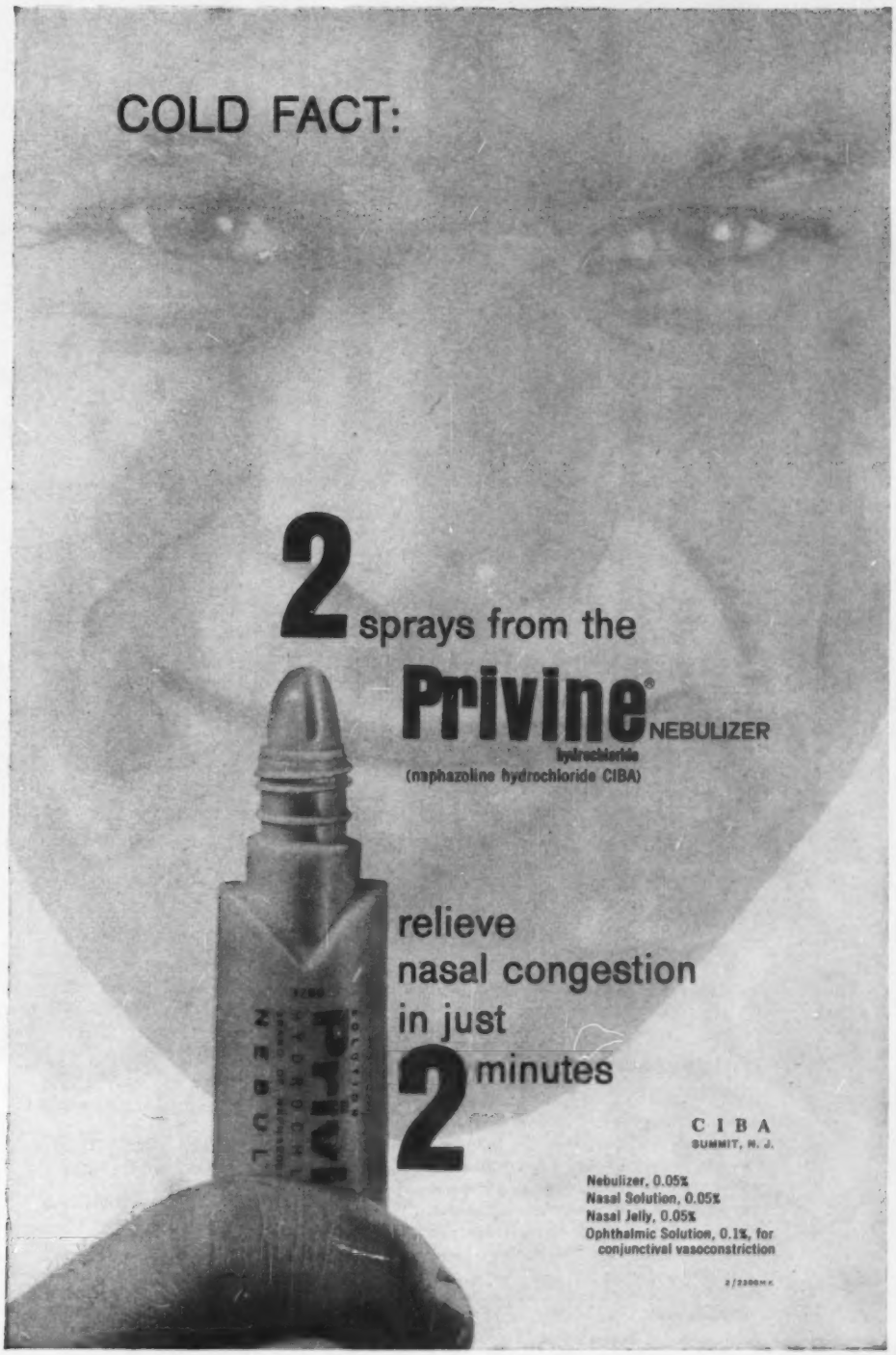
Tells when and why babies suck their thumbs and what to do about it. by Margaret B. Kerrick, 4 pages, 10 cents

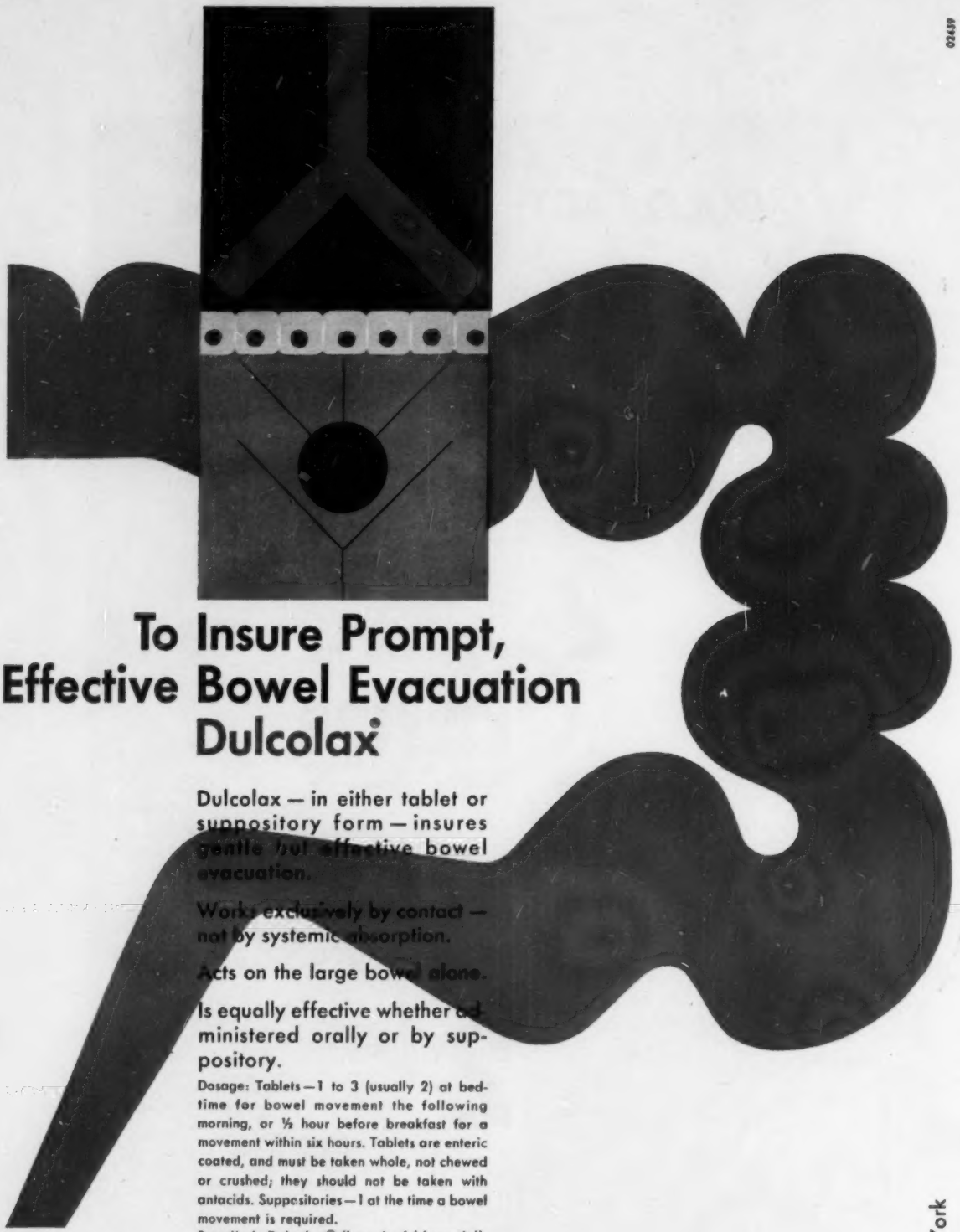
AMERICAN
MEDICAL
ASSOCIATION

535 N. Dearborn Street, Chicago 10, Illinois

"Oh come now, professor, what makes you think I might be getting outside help on this medical exam?"

"Room service!"


COLD FACT:
2 sprays from the
Privine® NEBULIZER
hydrochloride
(naphazoline hydrochloride CIBA)
relieve
nasal congestion
in just
2 minutes
CIBA
SUMMIT, N. J.
Nebulizer, 0.05%
Nasal Solution, 0.05%
Nasal Jelly, 0.05%
Ophthalmic Solution, 0.1%, for
conjunctival vasoconstriction



02459

To Insure Prompt, Effective Bowel Evacuation

Dulcolax®

Dulcolax — in either tablet or suppository form — insures gentle but effective bowel evacuation.

Works exclusively by contact — not by systemic absorption.

Acts on the large bowel alone.

Is equally effective whether administered orally or by suppository.

Dosage: Tablets — 1 to 3 (usually 2) at bedtime for bowel movement the following morning, or ½ hour before breakfast for a movement within six hours. Tablets are enteric coated, and must be taken whole, not chewed or crushed; they should not be taken with antacids. Suppositories — 1 at the time a bowel movement is required.

Supplied: Dulcolax® (brand of bisacodyl). Yellow enteric-coated tablets of 5 mg. in boxes of 6 and bottles of 100. Suppositories of 10 mg. in boxes of 6. Under license from C. H. Boehringer Sohn, Ingelheim.

Contact Laxative

Geigy

Ardsley, New York

In trichomoniasis, moniliasis, nonspecific vaginitis

BETADINE® kills outright

Brand of Povidone-Iodine

Kills by contact . . . virtually nonirritating to vaginal mucosa . . . is effective even in presence of blood, pus or vaginal secretions . . . will not permanently stain linen or clothing: color can be washed off with water.

Regimen: In the office—swab with Betadine Antiseptic, full strength.

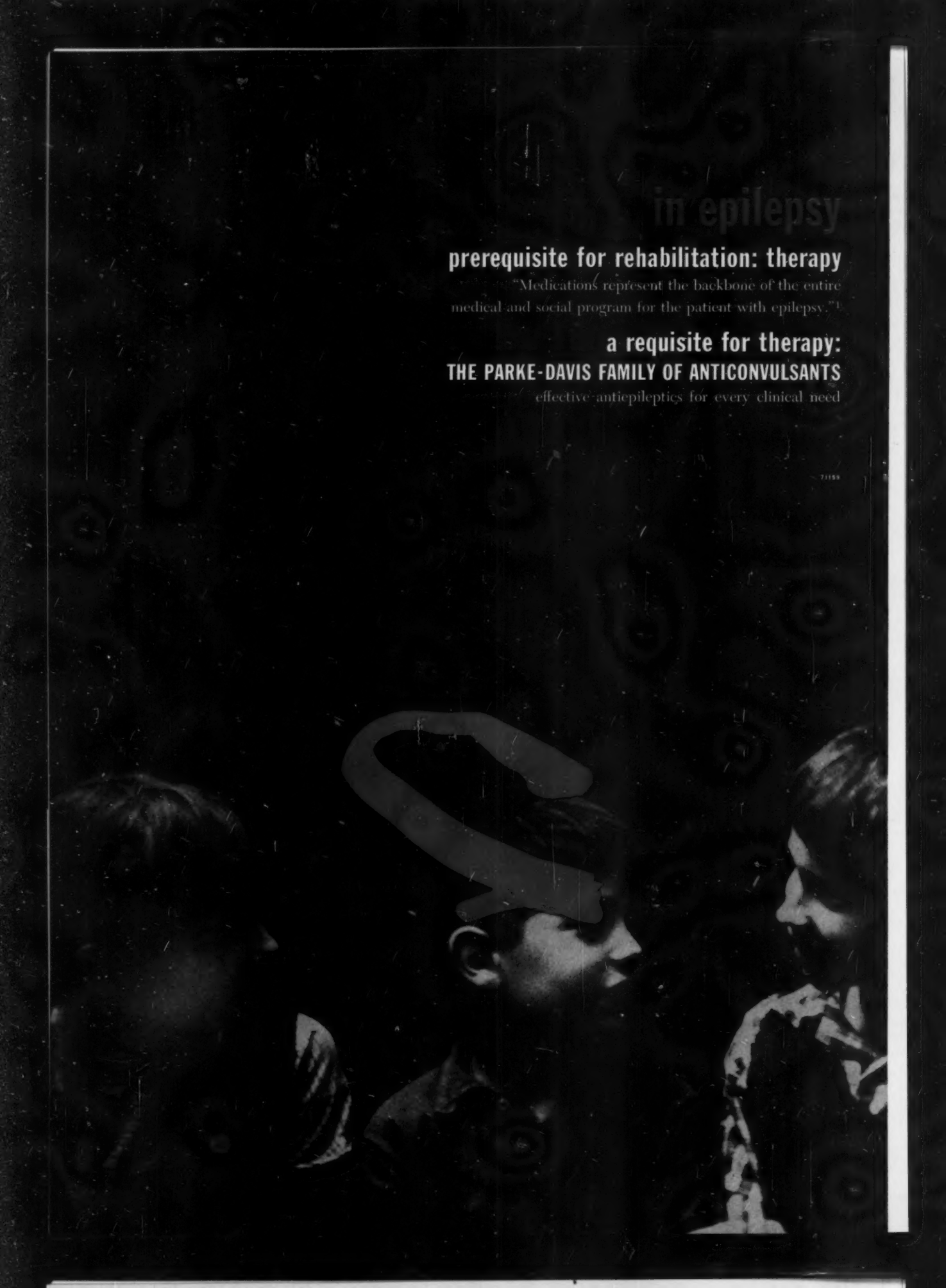
For patients' use at home—Betadine Vaginal Douche between office visits.

Available: Betadine Antiseptic in 8-oz. and 16-oz. bottles. Betadine Vaginal Douche in 8-oz. bottles.

Write for literature and samples Department "A"

virtually nonirritating to vaginal mucosa

TAILBY-NASON COMPANY, INC.
DOVER, DELAWARE


in epilepsy
prerequisite for rehabilitation: therapy
"Medications represent the backbone of the entire medical and social program for the patient with epilepsy."[1]
a requisite for therapy:
THE PARKE-DAVIS FAMILY OF ANTICONVULSANTS
effective antiepileptics for every clinical need
71159

for control of grand mal and psychomotor seizures

Dilantin®

KAPSEALS

"As an example of its effectiveness, I should like to mention the situation in one state hospital where the annual incidence of grand mal seizures was fairly constant at 7000 to 800 seizures per year. Within a few months after the introduction of DILANTIN Sodium, the seizure rate fell to around 250 per year, without any other significant change in the program."[1]

A drug of choice in the control of grand mal and psychomotor seizures, DILANTIN Sodium (diphenylhydantoin sodium, Parke-Davis) is available in several forms — including Kapseals of 0.03 Gm. and of 0.1 Gm. in bottles of 100 and 1,000.

PHELANTIN, which combines Dilantin with phenobarbital and desoxyephedrine hydrochloride, offers greater convenience and control for patients on combined therapy. It reduces the total number of capsules or tablets your patients have to take and prevents them from varying dosage.

PHELANTIN Kapseals (Dilantin 100 mg., phenobarbital 30 mg., desoxyephedrine hydrochloride 2.5 mg.) are supplied in bottles of 100.

for the petit mal triad

Phelantin Celontin Milontin

Clinical experience[2-6] with CELONTIN shows that it effectively contributes to the control of petit mal and psychomotor seizures and may be especially valuable in patients known to be refractory to other anticonvulsants. CELONTIN has not been observed to increase incidence or severity of grand mal attacks in patients with combined petit and grand mal seizures. Side effects are minimal. CELONTIN Kapseals (methsuximide, Parke-Davis) 0.3 Gm., are supplied in bottles of 100.

MILONTIN is an effective agent for the treatment of petit mal epilepsy. Relatively free from untoward side effects, MILONTIN successfully reduces the number and severity of attacks and is considered an excellent choice for initiating therapy in untreated patients. MILONTIN (phensuximide, Parke-Davis) is supplied in Kapseals, 0.5 Gm., bottles of 100 and 1,000, and in Suspension, 250 mg. per 4 cc., 16-ounce bottles.

PARKE, DAVIS & COMPANY • DETROIT 32, MICHIGAN

ROCHE LABORATORIES DIVISION OF HOFFMANN-LA ROCHE INC

NUTLEY 10 • N. J. NUTLEY 2-5000

Dear Doctor:

Dr. Perrin H. Long, at a recent meeting of the New York Academy of Sciences, pointed out that different antibacterial substances can "exercise their detrimental effect on different systems in the bacterial cell." For this reason he believes that with concurrent use of an antibiotic and a chemotherapeutic agent "one should achieve minimally an additive therapeutic effect."*

A new antibacterial -- high effectiveness and tolerance

Besides its advantages as a single antibacterial of choice, MADRIBON, which exerts its antibacterial effects by action on systems other than those affected by penicillin and the broad spectrums, can be efficiently used for conjoint therapy. For example: in the oral follow-up to penicillin injections, Madribon is appropriate because it is not antagonistic to penicillin or vice versa.

Furthermore, Dr. Long stresses the importance of the chemotherapeutic approach "in the treatment of infections, the causative organisms of which have proved to be resistant to the therapeutic effects of antibiotics."

In this respect it is interesting to note Madribon's reported success. Typical are such reports as Townsend and Borgstedt, who note that some penicillin-resistant infections (including staphylococcal and streptococcal) responded to Madribon; also the report of Leff, who records Madribon's control of a series of infections intractable to a most remarkably wide range of antibacterials.

As you may have noted, more and more reports on Madribon are establishing a whole series of new standards of efficiency in addition to the recog-

nized efficacy of modern antibacterial therapy. For your patients, Madribon translates these new standards into a series of new clinical benefits:

1. A wide range of bacterial infections, particularly those of the respiratory tract, can be efficiently controlled with advantageous cost-care, safety-effectiveness ratios.

2. Known "penicillin reactors," known "broad-spectrum reactors," and some "resistant bacterial infections" may now be efficiently tackled with a new, well-tolerated and highly effective antibacterial.

3. Special dosage situations (as in pediatric practice) and conjoint use with other medications are easily handled with new high-potency, low-dosage, high-tolerance Madribon.

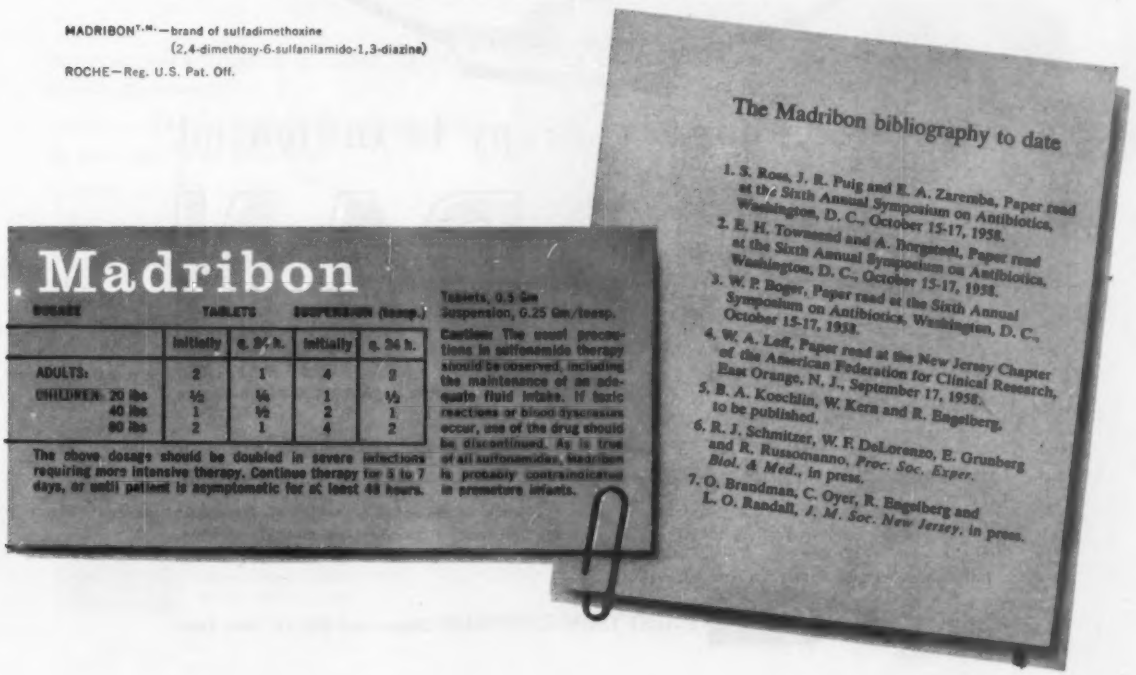
Low-dosage, long-acting Madribon combines effectively with antibiotics and/or antipyretics

Sincerely,

S. Evert Svenson, M.D.
Director of Medical Services

*P. H. Long, Ann. New York Acad. Sc., 69:385, 1957.

MADRIBON™—brand of sulfadimethoxine (2,4-dimethoxy-6-sulfanilamido-1,3-diazine)
ROCHE—Reg. U.S. Pat. Off.


Madribon
DOSAGE
TABLETS
SUSPENSION (teasp.)
Initially
q. 24 h.
Initially
q. 24 h.
ADULTS:
2
1
4
2
CHILDREN: 20 lbs
½
¼
1
½
40 lbs
1
½
2
1
60 lbs
2
1
4
2
The above dosage should be doubled in severe infections requiring more intensive therapy. Continue therapy for 5 to 7 days, or until patient is asymptomatic for at least 48 hours.
Tablets, 0.5 Gm
Suspension, 0.25 Gm/teasp.
Caution: The usual precautions in sulfonamide therapy should be observed, including the maintenance of an adequate fluid intake. If toxic reactions or blood dyscrasias occur, use of the drug should be discontinued. As is true of all sulfonamides, Madribon is probably contraindicated in premature infants.
The Madribon bibliography to date
1. S. Ross, J. R. Puig and E. A. Zaremba, Paper read at the Sixth Annual Symposium on Antibiotics, Washington, D. C., October 15-17, 1958.
2. E. H. Townsend and A. Borgstedt, Paper read at the Sixth Annual Symposium on Antibiotics, Washington, D. C., October 15-17, 1958.
3. W. P. Boger, Paper read at the Sixth Annual Symposium on Antibiotics, Washington, D. C., October 15-17, 1958.
4. W. A. Leff, Paper read at the New Jersey Chapter of the American Federation for Clinical Research, East Orange, N. J., September 17, 1958.
5. B. A. Koechlin, W. Kern and R. Engelberg, to be published.
6. R. J. Schmitzer, W. F. DeLorenzo, E. Grunberg and R. Russomanno, Proc. Soc. Exper. Biol. & Med., in press.
7. O. Brandman, C. Oyer, R. Engelberg and L. O. Randall, J. M. Soc. New Jersey, in press.

THE COUGH IS GONE...

whenever cough therapy is indicated

HYCODAN®

(DIHYDROCODEINONE WITH HOMATROPINE METHYLBROMIDE)

Relieves cough within 15-20 minutes, maintaining comfort for 6 hours or longer usually *without* impairing expectoration or inducing constipation.

Available in tasty syrup and convenient tablet forms. Each teaspoonful or tablet of HYCODAN* contains 5 mg. dihydrocodeinone bitartrate and 1.5 mg. Mesopin (homatropine methylbromide). *Average adult dose:* One teaspoonful or tablet after meals and at bedtime. May be habit-forming. Federal law permits oral prescription.

literature? write Endo ENDO LABORATORIES Richmond Hill 18, New York

*U. S. PAT. 2,553,409

"THE SELECTION
OF A CARDIAC
GLYCOSIDE WITH A
WIDE MARGIN
OF SAFETY,
SUCH AS GITALIN
[GITALIGIN],
AND ITS PROPER
ADMINISTRATION IN
ADEQUATE DOSAGE, ARE
OF INESTIMABLE VALUE..."*

GITALIGIN®†

GITALIGIN 0.5 mg. Tablets—bottles of 30 and 100.
GITALIGIN Injection Ampuls—2.5 mg. in 5 cc. sterile, I.V. solution.
GITALIGIN Drops—30 cc. bottle with calibrated dropper.

Arteriosclerotic Heart Disease

GITALIGIN is a "digitalis of choice"‡ for the following reasons:

WIDE SAFETY MARGIN—Average therapeutic dose only ⅓ the toxic dose.

SHORT LATENT PERIOD

MODERATE RATE OF DISSIPATION

THESE SIMPLE DOSAGE EQUIVALENTS MAKE IT EASY TO SWITCH YOUR PATIENT TO GITALIGIN—0.5 mg. of GITALIGIN is approximately equivalent to 0.1 Gm. digitalis leaf, 0.5 mg. digoxin or 0.1 mg. digitoxin.

*Harris, R., and Del Giacco, R. R.: Am. Heart J. *52*:300 1956.
†White's brand of amorphous gitalin.
‡Bibliography available on request.

White's

WHITE LABORATORIES, INC.
KENILWORTH, N. J.

announcing

a new topically superior

now available

for topical application in dermatotherapy

Kenalog (triamcinolone acetonide) is a new synthetic corticoid compound with powerful anti-inflammatory and antipruritic action. Developed by the Squibb Institute for Medical Research, and evaluated during preliminary clinical trials in over 1,000 patients, Kenalog used topically has demonstrated its great effectiveness in controlling most common dermatoses.[1] Symptoms of itching and burning are dramatically relieved after topical application of Kenalog.[1,2] A superior agent for both acute and chronic dermatoses, its unexcelled anti-inflammatory action is most clearly apparent in the treatment of chronic, therapeutically refractory conditions, such as chronic eczematous dermatitis.[3] Complete resolution is often obtained with Kenalog where certain other topically applied steroids have failed.[3]

Kenalog in ointment, cream or lotion form may be used for treatment of a wide variety of dermatoses including:

Atopic dermatitis
Contact dermatitis
Eczematous dermatitis
Neurodermatitis
Seborrheic dermatitis
Insect bites
Pruritus ani
Pruritus vulvae
Lichen simplex chronicus
Exfoliative dermatitis
Stasis dermatitis
Nummular eczema

Kena

SQUIBB

Squibb Quality – the Priceless Ingredient

anti-inflammatory steroid

Kenalog effectively provides for prompt symptomatic relief as well as control of many common dermatologic disorders.[1-7]

In double-blind tests in 309 patients comparing 0.1% Kenalog and 1.0% hydrocortisone, Kenalog exhibited superior anti-inflammatory, antiallergic and antipruritic activity.

Investigator	Total Cases	Kenalog Superior	Hydrocortisone Superior	Neither Effective	Equally Effective
Goodman[3]	50	32	3		15
Smith et al.[4]	109	75	3	3	28
Fitzpatrick et al.[5]	120	61	5		54
Lerner[6]	30	20	4	1	5
	309	188	15	4	102

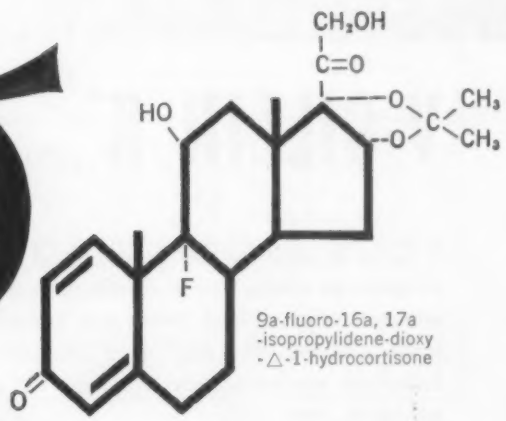
Kenalog is extremely well tolerated locally. No systemic toxicity has been observed in clinical studies, published and in progress, involving over 1,000 patients.[1,3] Metabolic studies show that there is no electrolyte disturbance when Kenalog is applied topically.[1,4,5]

1. Reports to the Squibb Institute for Medical Research.
2. Howell, C. M.: Squibb Clinical Research Notes 1:5 (Oct.) 1958.
3. Goodman, J. J.; Ibid. p. 1.
4. Smith, J. G.; Zawisza, R. J., and Blank, H.: Ibid. p. 6.
5. Fitzpatrick, T.; Crowe, F. W., and Walker, S. A.: Ibid. p. 12.
6. Lerner, A. B.: Ibid. p. 2.
7. Robinson, R. C. V.: Bull. School of Med., U. Maryland 43:54 (July) 1958.

Supply
Kenalog cream, 0.1% – 5 Gm. and 15 Gm. tubes.
Kenalog lotion, 0.1% – 15 cc. plastic squeeze bottles.
Kenalog ointment, 0.1% – 5 Gm. and 15 Gm. tubes.

log

Triamcinolone Acetonide



9a-fluoro-16a, 17a -isopropylidene-dioxy -△-1-hydrocortisone

"KENALOG" IS A SQUIBB TRADEMARK

V-CILLIN K® *provides dependable, fast, effective therapy*

V-Cillin K produces therapeutic blood levels in all patients within five to fifteen minutes after administration. Blood levels are higher than those attained with any other oral penicillin. Infections resolve rapidly. **Dosage:** 125 or 250 mg. three times daily.

***V-Cillin K®** (penicillin V potassium, Lilly)*

Supplied: In scored tablets of 125 and 250 mg. (200,000 and 400,000 units).

NEW V-CILLIN K®, PEDIATRIC

A taste treat for young patients. In bottles of 40 and 80 cc. Each 5-cc. teaspoonful provides 125 mg. of V-Cillin K.

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U.S.A.

933213

THE JOURNAL

OF THE

American Medical Association

Published Under the Auspices of the Board of Trustees

VOL. 169, NO. 2 — CHICAGO, ILLINOIS — JANUARY 10, 1959

COPYRIGHT, 1959, BY AMERICAN MEDICAL ASSOCIATION

STUDY OF STAPHYLOCOCCIC INFECTIONS OCCURRING ON A SURGICAL SERVICE

Marie L. Koch, Ph.D., Derward Lepley Jr., M.D., C. Morrison Schroeder, M.D.
and
Miles B. Smith, M.D., Milwaukee

Two 60-bed general surgery wards were compared as to the incidence of staphylococcic infections. In one ward, only routine precautions were taken against the spread of infections. The other ward was treated as nearly as possible like an isolation unit, with special bedding, dressing carts, and other facilities. Of 74 patients who acquired staphylococcic hospital infections during the one-year period, 41 were in the latter ward, and the semi-isolation techniques that had been used were found completely inadequate for the control of staphylococcic infections on surgical wards. Valuable data were obtained by culturing the organisms and classifying them according to coagulase reaction, antibiotic resistance, and bacteriophage type. The withdrawal of a given antibiotic for eight months was not sufficient to affect the antibiotic-resistance of prevailing strains, probably because the drugs used in any given hospital were but a fraction of those used in the community from which the patients came.

IN RECENT years increasing numbers of reports have appeared in the literature in regard to the seriousness of hospital acquired staphylococcic infections, the resistance of these organisms to the antibiotic drugs in common use, and the application of the bacteriophage-typing technique for determining the relationship of cultures from different sources.[1]

Our attention was first called to this problem while we were attempting to evaluate the cause of ever increasing numbers of cases of staphylococcic enteritis occurring on surgical wards.[1n] Although we had not experienced an actual outbreak of surgical staphylococcic infections, we were aware of the presence of sporadic cases. On this basis we decided to investigate the source of these infections, focusing our attention on the staff and personnel carrier as a potential source of cross infection, and to determine, if possible, ways and means of preventing the dissemination of Staphylococcus pyogenes var. aureus on the surgical wards.

Methods and Materials

In order to evaluate the possible benefits of simple semi-isolation techniques as a means of controlling spread of cross infection, two general surgery wards of 60 beds each, nearly identical in

From the Surgical Service and the Clinical Laboratory Service, Wood Veterans Administration Center, and the departments of surgery and microbiology and immunology, Marquette University School of Medicine.

physical structure and situated one above the other, were selected for study. One was established as a study ward, the other as a control ward. In the former, private and semiprivate rooms at one end were divided from the ward proper by double doors. This area was equipped with special bedding, dressing cart, utensils, and hand washing facilities and was as far as possible established as an isolation unit.

All patients who were admitted with infections and those who developed infections during hospitalization on the study ward were placed in this area. Personnel caring for these patients wore caps, gowns, masks, and gloves, and strict aseptic technique was used when dressings were being changed. However, the same personnel were responsible for the care of patients on the remainder of the ward, which included seven-bed rooms divided into admission and postoperative rooms. On the control ward, precautions other than those routinely used were not employed. A continuous record of each patient, in relation to time, place, contact with other patients, and personnel caring for him, was kept throughout the study period.

TABLE 1.—*Phages of Four Groups of Staphylococci and Miscellaneous Groups (Blair) and Phage Patterns Most Commonly Occurring in Our Study*

Group	Characteristic Phages	Common Phage Patterns
I	29, 52, 52A, 79	52
II	3A, 3B, 3C, 55, (80), (523)	3C
III	6, 7, 42E, 47, 53, 54, 70, 73, 75, 77, (42B), (VA4)	53/VA4, 44A, 7, 47/53/54/77/VA4, 77
IV	42D	
Miscellaneous	44A, 81	44A
Unclassified		80/81, 47/42D*

* Formerly reported as 52/42B/81.

Since it has been well established that a great number of staphylococci, indigenous to our hospital, are resistant to the antibiotic drugs in common use, we decided to test the efficacy of the use of "rotational" therapy as a means of delaying or preventing the emergence of drug-resistant strains. As it has been our experience that essentially complete cross resistance occurs between the tetracycline drugs (chlortetracycline, oxytetracycline, and tetracycline) in vitro, we decided to withdraw the use of these drugs for a period of eight months and restrict their use to special requests only. Due to complete cross resistance between these drugs in vitro, they will be referred to as "the tetracyclines" and results reported accordingly.

Bacteriological Procedures.—Nasopharyngeal and rectal cultures were made on a monthly basis of members of the personnel and staff of the two surgical wards under study and the operating suite, and whenever possible on patients on admission, prior to surgery, and on the fourth postoperative day. Stomach and intestinal lumina were cultured at the time of surgery and, in cases of infection, cultures were obtained until the infection had subsided.

All staphylococci isolated were tested for their ability to produce coagulase, either by the use of the biochemical method, with use of Bacto-Mannitol salt agar and/or by their ability to clot citrated human plasma.

Drug susceptibility of pure cultures was determined by the disk-plate method, with use of Sensi-Discs exclusively. The concentrations used were as follows: penicillin and bacitracin, 2 units per milliliter respectively; dihydrostreptomycin, 10 mcg. per milliliter; novobiocin, 30 mcg. per milliliter; and neomycin, chlortetracycline, oxytetracycline, tetracycline, and chloramphenicol, 5 mcg. per milliliter respectively. Strains inhibited by these respective concentrations were classified as "sensitive"; those showing a zone of inhibition of growth of 2 mm. or less were classified as "resistant."

The technique of bacteriophage typing was used to determine the relationship of cultures from different sources. Twenty-five staphylococcic phages were obtained through the courtesy of Dr. John E. Blair and stock cultures and phages were accomplished by the method of Blair and Carr [2] and Blair.[3] Only strong lytic reactions (50 plaques or more) were taken into consideration in reporting of results. Table 1 illustrates the phages of the four broad groups of staphylococci and the miscellaneous groups and the phage patterns most commonly occurring in our study.

Results

During the one-year study period, 74 patients acquired hospital infections caused by coagulase-positive, phage typable staphylococci; contacts were established in 42 of these cases. Forty-one of the patients were located on the study ward and 33 on the control ward. Of cases of cross infection, 24 were located on the study ward and 18 on the control ward. Eleven patients acquired a carrier state at one time or another during their hospitalization.

Included in the hospital acquired infections were 9 preoperative infections (as determined by cultures taken either prior to or at the time of surgery); 44 postoperative wound infections; 7 postoperative complications of other types; and 14 nonsurgical cutaneous infections. Fifty-one patients acquiring infections during their postoperative period indicate an infection rate of 4% (1,350 operations).

Twenty-four patients had infections at time of admission to the wards and 28 patients were nasopharyngeal and/or fecal carriers on admission.

In regard to the staff and personnel of the three study units, carrier rates were as follows: study ward, 34%; control ward, 38%; and operating suite, 40%. Of a total of 114 individual carriers, 49 were nasopharyngeal, 36 were fecal, and 29 were simultaneous nasopharyngeal and fecal carriers. Based

on the results of phage typing, 11 of these individuals were "persistent" carriers; that is, they harbored staphylococci of the same phage pattern for a minimum of five consecutive months. Their distribution was as follows: study ward, three; control ward, four; and operating suite, four.

We were unable to demonstrate any significant change in rate of incidence of staphylococci resistant to the three tetracycline drugs, due to a withdrawal of their use for a period of eight months. This phase of our investigation will be reported in detail in a subsequent paper.

One thousand five hundred forty-seven strains of Staph. pyogenes var. aureus were isolated from a variety of 3,632 clinical specimens cultured for this organism. Of these, 56% were coagulase-negative, of which 36% were resistant to penicillin, 19% to erythromycin, 38% to dihydrostreptomycin, 38% to the tetracyclines, and 18% to chloramphenicol. Forty-four per cent of the strains were coagulase-positive, with incidence of drug resistance as follows: 42% to penicillin, 16% to erythromycin, 36% to dihydrostreptomycin, 30% to the tetracyclines, and 17% to chloramphenicol. Strains resistant to bacitracin (12%), neomycin (20%), and novobiocin (17%) were infrequently encountered and therefore will not be further mentioned.

Of 515 strains subjected to phage typing with the 25 phages used, 27% were untypable and 82% were typable with one or more of the phages used. Of the latter, 56% were typable with phages used at the routine test dilution and 15% with phages used at a 1:10 dilution.

Incidence of drug resistance among the untypable strains was 63%, with 26% resistant to penicillin, 21% to erythromycin, 38% to dihydrostreptomycin, 33% to the tetracyclines, and 35% to chloramphenicol. Incidence of drug resistance among the typable strains was 59% with individual drug resistance as follows: 43% to penicillin, 15% to erythromycin, 35% to dihydrostreptomycin, 32% to the tetracyclines, and 15% to chloramphenicol. Of the resistant typable strains, 30% were resistant to a single drug and 65% were multiple resistant.

Table 2 illustrates the incidence of phage patterns in relation to antibiotic susceptibility (372 strains; 33 patterns). Our most commonly occurring patterns were 53/VA4, 44A, 7, 47/42D, 47/53/54/77/VA4, 77, 80/81, 52 and 3C, and these staphylococci accounted for 86% of the total number of strains.

Incidence of drug resistance in the above patterns was 63% with drug resistance as follows: 46% to penicillin, 16% to erythromycin, 37% to dihydrostreptomycin, 35% to the tetracyclines, and 16% to chloramphenicol. Thirty-three per cent of the remaining staphylococci (falling into 24 patterns) were drug resistant.

Table 3 illustrates the relationship of patients with hospital acquired infections and those having infections on admission to the distribution of phage patterns.

Hospital Acquired Infections.—Of 74 patients having hospital acquired infections, 83% were caused by staphylococci of eight of our commonly occurring patterns (53/VA4, 44A, 7, 47/53/54/77/-VA4, 77, 47/42D, 80/81, and 3C). However, 39 of the 42 cases of cross infection were caused by staphylococci of the first five patterns. Therefore,

TABLE 2.—*Relation of Incidence of Phage Patterns to Antibiotic Susceptibility (372 Strains)*

Phage Pattern	Total No. of Strains	Total No. Resistant	No. Resistant to*				
			P	E	DS	T	Ch
53/VA4†	105	98	76	32	78	54	31
44A	48	27	16	6	15	14	4
7‡	44	20	8	4	4	2	12
47/42D§	37	14	11	0	2	7	1
47/53/54/77/VA4‖	30	16	15	6	11	7	2
80/81	16	14	10	2	4	14	1
77	12	7	2	2	4	6	2
52¶	12	6	6	1	2	4	0
3C#	11	4	2	0	2	2	1
47/81	4	2	1	0	1	0	0
52A/81	3	3	2	0	2	2	1
7/47/53/54/75	3	2	1	1	2	1	1
47/53/54/77/VA4/81	2	2	0	0	2	2	0
81	2	2	2	0	1	0	0
77/44A	2	2	2	0	1	1	0
47/53/77/VA4/44A	2	2	2	0	1	1	0
52/79/44A	2	1	1	1	1	1	0
79	1	1	1	0	1	0	0
523	1	1	1	0	0	0	0
7/VA4/44A	1	1	1	0	1	1	0
52A	6	0	0	0	0	0	0
29/44A	5	0	0	0	0	0	0
47	4	0	0	0	0	0	0
42D	4	0	0	0	0	0	0
70	4	0	0	0	0	0	0
3A/44A	3	0	0	0	0	0	0
42D/44A	2	0	0	0	0	0	0
3A/3B/3C/55	1	0	0	0	0	0	0
7/47/53/73	1	0	0	0	0	0	0
6/73	1	0	0	0	0	0	0
55	1	0	0	0	0	0	0
42B	1	0	0	0	0	0	0
29/47	1	0	0	0	0	0	0
Grand totals	372	220	162	56	122	119	58
% resistant		59	43	15	35	32	15

* P = penicillin; E = erythromycin; DS = dihydrostreptomycin; T = tetracyclines; and Ch = chloramphenicol.
† May be joined by 77 or 47.
‡ May be joined by 77.
§ May be joined by 53, VA4, or 53/VA4.
‖ May be joined by 6.
¶ May be joined by 52A.
# May be joined by 3A, 3B, or 55.

our predominant or major hospital patterns were 53/VA4, 44A, 7, 47/53/54/77/VA4, and 77.

In regard to the 28 cases of cross infection of postoperative wounds, of the five predominant patterns, 53/VA4 staphylococci were responsible for 13; 44A for 6; pattern 7 for 3; 47/53/54/77/VA4 for 2; and pattern 77 for 2.

Admission Infections.—Of 24 patients having infections on admission, 17 were caused by staphylococci of six of our commonly occurring patterns (53/VA4, 44A, 47/53/54/77/VA4, 77, 80/81, and 3C). However, 10 of these cases were caused by

staphylococci included in four of our predominant patterns. Table 4 illustrates incidence of phage patterns and their antibiotic susceptibilities in relation to the three groups of persons studied.

TABLE 3.—*Incidence of Patients with Hospital Acquired Infections and Patients with Infections at Time of Admission in Relation to Distribution of Phage Pattern*

Phage Pattern	Pre-operative Infections	Post-operative Infected Wounds	Other Post-operative Infections	Non-operative Cutaneous Infections
Number of Cases of Hospital Acquired Cross Infections (42)				
53/VA4	1	18	2	1
44A	2	6	1	1
7	1	3	1	0
47/53/54/77/VA4	0	2	0	1
77	1	2	0	1
47/42D	0	1	0	0
80/81	0	0	0	1
52A/81	0	1	0	0
Totals	5	28	4	5
Hospital Acquired Infections Lacking Demonstrable Contacts (32)				
53/VA4	0	3	1	3
7	1	1	1	0
77	0	1	0	0
47/42D	0	2	1	3
80/81	0	1	1	1
3C	0	2	0	0
10 less common patterns*	0	5	0	6
Totals	1	15	4	12
Number of Cases of Admission Infections (24)				
53/VA4	1	0	1	1
44A	0	0	0	2
47/53/54/77/VA4	0	0	0	4
77	0	0	0	1
80/81	0	0	0	4
3C	0	0	0	3
5 less common patterns†	1	2	0	4
Totals	2	2	1	19

* Patterns responsible for five postoperative wound infections: 47, 6/75, 42B, 52B, and 3A/44A.
† Patterns responsible for two postoperative wound infections: 52/79/44A and 47/81.

Group A represents 122 strains (24 patterns) isolated from cultures from a wide variety of clinical sources from 102 inpatients. Included in this group are 42 patients with hospital acquired cross infections, 32 patients with hospital acquired infections but lacking demonstrable contacts, and 11 patients who acquired a carrier state sometime during their hospitalization. Staphylococci of our five major hospital patterns (53/VA4, 44A, 7, 47/53/54/77/VA4, and 77) accounted for 70% of the total number, and were responsible for 39 of the 42 cases of cross infection.

Incidence of drug resistance in group A was 65%, with 48% of the strains resistant to penicillin, 19% to erythromycin, 45% to dihydrostreptomycin, 44% to the tetracyclines, and 25% to chloramphenicol.

Group B represents 178 strains isolated from nasopharyngeal and/or fecal carriers from the staff and personnel of the study and control wards and from the operating suite. Of these, 152 were nasopharyngeal isolations and 26 were fecal. Staphylococci of our five major hospital patterns accounted for 68% of the total number. Pattern 53/VA4 staphylococci were harbored by 16 carriers, 44A by 12, pattern 7 by 10, 47/53/54/77/VA4 by 7, and pattern 77 by 2. Staphylococci of 53/VA4, 44A, and 7 were harbored by both nasopharyngeal and fecal carriers, whereas those of the remaining patterns were harbored by the former only.

Incidence of drug resistance in group B was 56%, with 38% of the strains resistant to penicillin, 15% to erythromycin, 26% to dihydrostreptomycin, 22% to the tetracyclines, and 10% to chloramphenicol.

Comparison of groups A and B shows that a close correlation exists between phage patterns of staphylococci cultured from patients with hospital acquired cross infections and those exhibited by carriers among the staff and personnel. Although we encountered nine nasopharyngeal carriers among the inpatients, only one played a role in cross infection. Of our predominant patterns, 53/VA4 and 47/53/54/77/VA4 were the only two associated with these patients. Other patient-to-patient contacts, in cross infections, will be discussed later.

TABLE 4.—*Incidence of Phage Patterns and Their Antibiotic Susceptibilities in Relation to the Three Groups of Persons Studied*

Group	Phage Pattern	Total No. of Strains	Total No. Resistant	No. Resistant to* P	E	DS	T	Ch
A	53/VA4	42	36	31	15	32	25	13
Inpatient strains	44A	16	10	7	3	6	8	3
	7	14	9	1	2	2	2	9
	47/42D	10	4	4	0	3	4	1
	47/53/54/77/VA4	9	3	3	2	2	2	1
	80/81	4	4	4	0	0	4	0
	77	4	2	1	2	2	2	2
	52	1	1	1	0	1	1	0
	3C	2	2	2	0	0	0	0
	Less common patterns	20	9	5	0	7	6	2
Totals		122	80	59	24	55	54	31
% resistant			65	48	19	45	44	25
B	53/VA4	50	45	34	14	29	23	13
Carrier strains	44A	28	13	7	3	7	4	0
(staff and	7	26	9	5	2	1	0	3
personnel)	47/42D	22	10	7	0	0	3	0
	47/53/54/77/VA4	11	8	7	1	5	1	0
	80/81	3	2	0	1	0	2	0
	77	6	4	2	0	2	3	1
	52	11	5	5	1	2	3	0
	3C	2	1	0	0	1	1	1
	Less common patterns	19	1	1	0	0	0	0
Totals		178	98	68	22	47	40	18
% resistant			56	38	15	26	22	10
C	53/VA4	13	12	11	3	12	6	5
Admission strains	44A	4	4	2	0	2	2	1
	7	4	2	2	0	1	0	0
	47/42D	5	0	0	0	0	0	0
	47/53/54/77/VA4	10	5	5	3	4	4	2
	80/81	9	8	6	1	4	8	1
	77	2	1	0	1	0	1	0
	52	0	0	0	0	0	0	0
	3C	7	1	0	0	1	1	1
	Less common patterns	18	8	8	1	4	2	0
Totals		72	41	34	9	28	24	10
% resistant			56	47	12	38	33	13

* P = penicillin; E = erythromycin; DS = dihydrostreptomycin; T = tetracyclines; and Ch = chloramphenicol.

Group C represents 72 strains (21 patterns) isolated from various clinical sources from 24 patients having infections at the time of admission and from 28 nasopharyngeal and/or fecal admission carriers. Forty-five per cent of these staphylococci fell into our five predominant patterns (53/VA4, 44A, 7, 47/53/54/77/VA4, and 77).

Incidence of drug resistance in this group was 56%, with 47% of the strains resistant to penicillin, 12% to erythromycin, 38% to dihydrostreptomycin, 33% to the tetracyclines, and 13% to chloramphenicol.

It is obvious from the foregoing report that our predominating "endemic" pattern was 53/VA4. This pattern included 105 strains, or more than twice as many strains as those occurring in any other single pattern. These staphylococci were responsible for 13 of 28 cases of hospital acquired postoperative cross-wound infections. They comprised 30% of all strains isolated from infected lesions from patients having hospital acquired infections and 30% of all strains harbored by the staff and personnel, including a total of 16 carriers (5 of whom were persistent carriers). In addition they were also harbored by six inpatient and three admission patient carriers. Eighty-seven per cent of the 53/VA4 strains were drug resistant and, of these, 84% were multiple resistant. Furthermore, 46% of all cultures resistant to penicillin and 50% of all cultures resistant to the three tetracycline drugs were of this pattern.

For the purpose of comparison, our second most commonly occurring pattern was 44A, which included 48 strains. These staphylococci were responsible for 6 of the 28 cases of hospital acquired postoperative cross infections of wounds. They comprised 12% of all strains isolated from infected lesions from patients with hospital acquired infections, and 15% of all strains harbored by the staff and personnel, including a total of 11 carriers (2 of whom were persistent carriers). In addition they were harbored by one admission carrier. Fifty-six per cent of the 44A staphylococci were drug resistant and of these, 11% were multiple resistant.

In the 42 cases of hospital acquired cross infections, results indicate that 13 infections had their origin in the operating suite; contacts included two surgeons, five anesthetists, two scrub nurses, and two aides. Twenty-four cases apparently originated from contacts with ward staff and personnel carriers. These included two surgeons (including one listed in the above category), five nurses, and three aides (table 5).

Of 17 cases of cross infection due to 53/VA4 staphylococci, results of phage typing indicate that 2 had their origin in operating suite and 15 in the wards. Of the latter, 10 originated from a single contact of the study ward and 5 from a single contact on the control ward. Both contacts were ward nurses and both were persistent nasopharyngeal carriers and transient fecal carriers of the organism in question.

Five cases of cross infection were traced to patient-to-patient contacts. Four contacts had open cutaneous lesions and one was a nasopharyngeal carrier. Pattern 53/VA4 staphylococci were not concerned in these cases; incriminating patterns were 44A, 47/53/54/77/VA4, 80/81, and 52A/81 (table 5).

Seven cases of auto-infection were included in the group of 32 hospital acquired infections lacking demonstrable contacts. The responsible staphylococci were included in patterns 53/VA4 (2 cases), 3A/44A, 80/81 (2 cases), 52A/81, and 3C.

Comment

Results of this investigation indicate that our infection rate (4%) is lower than that reported by Jeffrey and Sklaroff [1m] in a similar study (9%). Our infection rate seems favorably low, especially when we take into consideration that 38 of our 51 patients with postoperative infections had major surgery, the operations requiring two to five hours. Furthermore, all patients were males and 70% were over 50 years of age. Incidentally, 36 of these patients received antibiotic drugs prophylactically and/or therapeutically. Six patients received drugs on the latter basis, to which their respective strains were resistant in vitro.

TABLE 5.—*Professional Status of Carrier Contacts in Relation to Number of Cases of Cross Infection*

Professional Status of Carrier	No.	Cross Infection Cases, No.
Operating Suite		
Surgeons	2	2
Anesthesiologists	5	7
Scrub nurses	2	2
Aides	2	2
Study ward		
Ward surgeons	1	2
Nurses	3	12
Aides	1	1
Control ward		
Ward surgeons	1	1
Nurses	2	6
Aides	2	2
Patient-to-patient contacts	5	5

Since a greater number of cross infections occurred on the study ward than occurred on the control ward, we conclude that the practice of semi-isolation techniques was completely inadequate for the control of spread of staphylococcic infections on surgical wards.

The results of the use of rotational therapy as a means of delaying or preventing the emergence of drug-resistant staphylococci were equally disappointing. We were unable to demonstrate that the withdrawal of the use of tetracycline drugs, for a period of eight months, in any way influenced the rate of incidence in recovery of resistant strains. This is not too surprising when one considers that the amount of those drugs used in our hospital represents but a small fraction of their use through-

out the area from which we draw patients, a premise substantiated by 33% of our admission strains being resistant to the drugs in question.

We were able to establish, by phage typing of cultures, a correlation between phage patterns of staphylococci responsible for hospital cross infections and those exhibited by staff and personnel carriers of both wards and the operating suite. In the past, much attention has been focused on the nasal and nasopharyngeal carrier as the main source of spread of infection in hospital populations.[4] However, little attention has been focused on the fecal carrier. Brodie and his associates [16] emphasize the importance of the latter among hospitalized patients as an added potential source of infection; the authors call attention to their presence among the surgical staff and personnel. If our search for carriers had been based solely on nasopharyngeal isolations, 31% of our 114 carriers would have been completely overlooked as well as the interesting phenomenon that the nasopharyngeal carrier is frequently a simultaneous fecal carrier.

The problem of control of staff and personnel carriers remains a difficult one. We have no new ideas to offer but reemphasize the need for a diligent search for carriers on the basis of phage typing of cultures. The fact that 65% of our inpatient strains and 55% of our carrier strains were drug resistant suggests that the acquisition of these organisms by the latter group is primarily a matter of their availability within a given area. Consequently, the strict practice of aseptic techniques in the handling and care of patients should result in a lowering of carrier rate, and a subsequent reduction in the number of cross infections due to resistant staphylococci.

Although we did not encounter any cases of bacteremia in our series, four deaths were included in which coexisting staphylococcic infections were considered to be a contributing factor. Our problem concerned sporadic cases rather than an actual outbreak of staphylococcic infections. What then is the effect of such cases occurring on a surgical service? Our experience agrees with that reported by Jeffrey and Sklaroff [18] that the primary effect is economic, brought about by prolongation of hospital stay. For example, occurrence of cross infections of postoperative wounds in 18 of our patients resulted in a total increase in hospital stay of 432 days beyond the usual time required for hospitalization, or a mean of 24 days per patient. The financial impact of such a situation is apparent.

We found little evidence to support the reasoning that inpatient nasopharyngeal carriers of coagulase-positive staphylococci serve as a potential source of cross infection. On the other hand, patients having open cutaneous lesions present a real hazard as sources of cross infection on surgical wards.

It has been frequently emphasized in the past [17] that, in any particular hospital, the important staphylococci may belong to only a few phage patterns carried in the anterior nares or nasopharynx of the staff and personnel. Such has been our experience, the important staphylococci in our series belonging to 5 of 33 patterns. Furthermore, staphylococci of each of the five important patterns were also introduced into the wards from outside sources. Our results also indicate that staphylococci of our "predominant" or "endemic" pattern (53/VA4) were endowed with enhanced powers of communicability, infectivity, and resistance to the antibiotic drugs in common use.

The universal observation that the majority of drug-resistant staphylococci belong to broad group 3 correlates with our results. Of 220 drug-resistant strains, 62% belonged to this group. However, drug-resistant staphylococci were also encountered in each of the remaining groups.

Since 1954 the dissemination of 80/81 staphylococci in the United States has been wide and rapid. As a result, these organisms are causing particular concern throughout the country. However, the chief concern has been limited to outbreaks of infections in nurseries and in outbreaks of breast abscesses in nursing mothers. Although staphylococci of this pattern were included in our nine commonly occurring patterns, they were of little or no significance in cross infections (only 1 in 42 cases, and this a nonsurgical cutaneous infection). It is pertinent to mention that the patients from whom these particular staphylococci were recovered were all males, with the majority over 50 years of age. Thus it would seem that these strains have a special predilection for the newborn infant and nursing mothers.

It is regrettable that we were unable to subject all of our cultures of coagulase-positive staphylococci to phage typing. During the first four months of the study period, we were handicapped by lack of adequate technical assistance and subsequently lost a number of stock cultures due to contamination on refrigeration.

Conclusions

The problems of control of staff and personnel as contacts in cross infection and the prevention of emergence of drug-resistant strains have not been solved by the results of our investigation. They remain extremely difficult problems. Certainly they call for strict practice of aseptic techniques and for the conservative and intelligent use of the antibiotic drugs at our disposal.

For a better understanding of the pathology, epidemiology, and chemotherapy of hospital acquired staphylococcic infections occurring on a surgical service, it is necessary to determine the drug susceptibility and phage patterns of each strain cultured from inpatients and admission pa- and personnel.
tients, as well as from periodic cultures of the staff

West National Avenue at 54th Street (Dr. Smith).

Mrs. Lorraine M. Kastensen and Mr. Abe Resnick gave technical assistance for this study.

References

1. (*a*) Barber, M., and Burston, J.: Antibiotic-Resistant Staphylococcal Infection: Study of Antibiotic Sensitivity in Relation to Bacteriophage Types, Lancet **2**:578-583 (Sept. 17) 1955. (*b*) A. M. A. Hears Report of Hospital Infections, Mod. Hosp. **90**:49-51 (Jan.) 1958. (*c*) Bynoe, E. T.; Elder, R. H.; and Comtois, R. D.: Phage-Typing and Antibiotic Resistance of Staphylococci Isolated in General Hospital, Canad. J. Microbiol. **2**:346-358 (April) 1956. (*d*) Brodie, J.; Sommerville, T.; and Wilson, S. G. F.: Coagulase-Positive Staphylococci: Serial Survey for Nasal Carriers During First Six Months of Nursing Training, Brit. M. J. **1**:667-669 (March 24) 1956. (*e*) Brodie, J.; Kerr, M. R.; and Sommerville, T.: Hospital Staphylococcus: Comparison of Nasal and Faecal Carrier States, Lancet **1**:19-20 (Jan. 7) 1956. (*f*) Conference on Staphylococcic Infections, J. A. M. A. **166**:1177-1203 (March 8) 1958. (*g*) Duncan, I. B. R.; Collins, A. M.; Neelin, E. M.; and Roy, T. E.: Nasal Carriage of Staphylococcus Pyogenes by Student Nurses, Canad. M. A. J. **77**:1001-1009 (Dec. 1) 1957. (*h*) Halloway, W. J., and Scott, E. G.: Studies on Staphylococcus: Nasopharyngeal Carriers, Delaware M. J. **28**:4-5 (Jan.) 1956. (*i*) Howe, C. W.: Postoperative Wound Infections due to Staphylococcus Aureus, New England J. Med. **251**:411-417 (Sept. 9) 1954. (*j*) Jackson, G. G.; Dowling, H. F.; and Lepper, M. H.: Bacteriophage Typing of Staphylococci: Technique and Patterns of Lysis, J. Lab. & Clin. Med. **44**:14-28; Epidemiologic Studies Among Patients, Household Contacts, and Hospital Personnel, ibid. **44**:29-40 (July) 1954. (*k*) Josephson, J. E., and Butler, R. W.: Hospital Staphylococci, Canad. M. A. J. **77**:567-575 (Sept. 15) 1957. (*m*) Jeffrey, J. S., and Sklaroff, S. A.: Incidence of Wound Infection, Lancet **1**:365-368 (Feb. 15) 1958. (*n*) Lepley, D., Jr., and Smith, M. B.: Staphylococcal Enterocolitis, A. M. A. Arch. Surg. **75**:377-387 (Sept.) 1957. (*o*) Levin, M. N.: Staphylococcal Hospital Infections, New England J. Med. **256**:155-158 (Jan. 24) 1957. (*p*) Miles, A. A.: Epidemiology of Wound Infection, Lancet **1**:809-813 (June 24) 1944.

2. Blair, J. E., and Carr, M.: Bacteriophage Typing of Staphylococci, J. Infect. Dis. **93**:1-13 (July-Aug.) 1953.

3. Blair, J. E.: Personal communication to the authors.

4. References 1*d*, *g*, *h*, and *p*.

TREATMENT OF HYPERTENSION WITH CHLOROTHIAZIDE

Edward D. Freis, M.D., Washington, D. C.

When chlorothiazide is used, lower and, hence, less toxic dosages of other hypertensive agents become effective in controlling blood pressure. Chlorothiazide does not reduce blood pressure in normotensive subjects, although the drug induces the same increase in salt excretion. Regarding the mechanism of antihypertensive effect of chlorothiazide, it may be tentatively concluded that the blood pressure reduction accompanies the salt loss and probably is a consequence of it. When chlorothiazide is added to the regimen of a patient taking ganglionic blocking agents, the dosage of the latter must be reduced by half. The responsiveness of the patient is so remarkably increased by chlorothiazide that, if full dosage is continued, severe hypotension, including postural collapse, usually will occur. The other so-called toxic reactions to chlorothiazide are only extensions of its fundamental saluretic and kaluretic actions. Hypopotassemia is frequent, and potassium supplements should be used when this develops.

After more than a year of clinical trials, chlorothiazide has become established as a valuable agent for the control of hypertension.[1] It is an especially important drug in general practice, because it can be administered according to straightforward dosage schedules and, in the presence of uncomplicated hypertension, has been relatively free of toxic reactions. Indeed, it has reduced the over-all incidence of toxicity and side-effects of antihypertensive drug therapy. When chlorothiazide is used, lower and, hence, less toxic dosages of other hypertensive agents, such as hydralazine or the ganglion blocking drugs, become effective in controlling blood pressure. The special circumstances under which toxicity can occur will be discussed later.

Mechanism of Effects

Previous reports from this laboratory[2] stressed the importance of salt loss in the mechanism of the antihypertensive effects of the drug. This view has been contested by Wilkins and co-workers.[3] However, further work in this laboratory in the interim has only strengthened the initial observations. These studies may be reviewed briefly here. When chlorothiazide was given to nonedematous, hypertensive

Read in the Symposium on the Newer Diuretics—Especially Chlorothiazide—Indications and Reported Use before the Section on General Practice at the 107th Annual Meeting of the American Medical Association, San Francisco, June 26, 1958.

patients, a urinary loss of approximately 250 mEq. or roughly 1.5 Gm. of salt occurred primarily in the first 24 to 48 hours after the drug was administered. This depletion seemed to be derived in large measure from the extracellular fluid, since measurements of this space disclosed reductions of 1 to 2 liters. Accompanying the diminution in extracellular fluid space was also a reduction in plasma volume (fig. 1). The reduction in plasma volume had also been observed by Tapia and associates.[4] At the same time that these events occurred, the blood pressure fell. It did not precede the saluresis (urinary loss of salt) or follow days later.

These changes were not peculiar to chlorothiazide. They occurred also with ammonium chloride plus mercurials. It is as if well-compensated individuals are, in effect, slightly edematous. At least there seems to be an easily mobilized pool of extracellular fluid which can be skimmed off by saluretic drugs. Another point that leads one to believe that the antihypertensive effect of such agents is secondary to the salt loss is that if sufficient salt is given (and this may require as much as 25 Gm. per day) the antihypertensive effect of the drug is at least partially overcome.

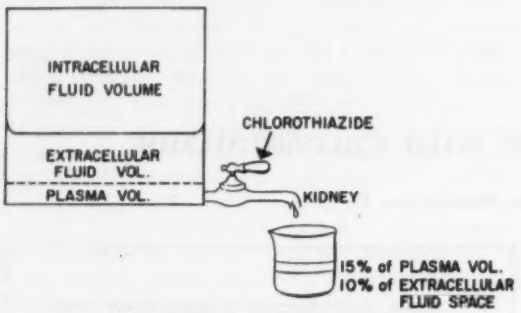


Fig. 1.—Effect of chlorothiazide in nonedematous patients.

Interestingly enough, chlorothiazide does not reduce blood pressure in normotensive subjects, although the drug induces the same increase in salt excretion. However, Dr. A. Wanko, in this laboratory, has shown recently that it changes vascular responsiveness in normal persons even though basal blood pressure is not altered.[5] The pressor response to arterenol is decreased, and the depressor response to ganglionic blocking agents is increased. Most important of all, the vascular responsiveness reverts back to pre-chlorothiazide-therapy levels when the plasma volume is restored with 500 ml. of a 6% solution of dextran.

Dr. I. M. Wilson, also in this laboratory, has carried out repeated determinations of plasma volume and extracellular fluid space in hypertensive patients treated for long periods.[6] She finds that some reduction persists until the drug is withdrawn, after which the volumes rise promptly to pretreatment levels.

At present, therefore, regarding the mechanism of antihypertensive effect of chlorothiazide, it may be tentatively concluded that (1) it has no unique hypotensive properties not shared by other saluretic agents, such as the mercurials; (2) the blood pressure reduction accompanies the salt loss and probably is a consequence of it; (3) the salt loss comes primarily from the extracellular fluid, and the drug produces a sustained reduction of extracellular fluid space and plasma volume; and (4) the reduction of plasma volume and of tissue pressure due to the extracellular fluid loss may play a role in reducing the basal blood pressure of hypertensive but not of normotensive persons and of vascular reactivity in both.

Combined Therapy

It is this increased responsiveness to depressor stimuli that makes chlorothiazide an effective agent in the management of hypertensive patients. By itself, it has only a moderate effect on blood pressure in most patients. But when any type of antihypertensive agent is given in conjunction with chlorothiazide, it gains a new depressor effectiveness. This is particularly true in the case of the ganglionic blocking drugs and of hydralazine (Apresoline) hydrochloride. Because dosages need be less, treatment becomes not only more effective but also simpler, since it is no longer necessary to skirt on the edge of toxic dose levels.

In order for maximum benefit to be obtained from chlorothiazide it must be remembered that hypertensive patients differ in their responsiveness to antihypertensive medicaments. For example, in a random group of 100 hypertensive patients, 20 of those with milder degrees may respond satisfactorily to chlorothiazide alone, 20 others to chlorothiazide and Rauwolfia preparations, and 40 to chlorothiazide and hydralazine, while the final 20 may require the ganglionic blocking drugs, at least for a time. Which of these combinations approaches most closely the ideal of general effectiveness, safety, tolerability, and simplicity? Experience here would indicate that in all forms of mild and moderate hypertension which merit any treatment at all the nearest approach to the ideal is represented by chlorothiazide and hydralazine.

The dosage of chlorothiazide in patients with hypertension uncomplicated by cardiac or renal failure can safely be 500 mg. given twice daily on arising and at bedtime. This will be an effective saluretic dosage in practically all patients, and it avoids the needless complications of titration. In this clinic, patients with uncomplicated hypertension have been given this dosage continuously for

more than one year without toxic effects. To this is added 25 mg. of hydralazine two or three times daily. If this dosage is insufficient, it is raised to 50 mg. three times daily but not beyond this level, since toxic effects can occur at higher dosages. Unlike some other antihypertensive drugs, this combination does not produce easy fatigue, lethargy, or mental dulling. One avoids the considerable danger of precipitating an emotional depression in intellectual persons who are given Rauwolfia, as well as the inconvenience of dosage juggling so frequently required with the ganglionic blocking drugs. Of course Rauwolfia, the ganglionic blocking agents, or both are added whenever the chlorothiazide-hydralazine regimen is ineffective. Dosage readjustments of the blocking drugs are not as frequently required in patients who are also taking chlorothiazide. In addition, the side-effects of ganglionic blockade are far less, due to the lower dosage requirement.

Toxic Reactions

It is necessary at this point to emphasize that, when chlorothiazide is added to the regimen of a patient taking ganglionic blocking agents, the dosage of the latter must be reduced by half. The responsiveness of the patient is so remarkably increased by chlorothiazide that, if full dosage is continued, severe hypotension, including postural collapse, usually will occur. For the same reason, care must be used in administering chlorothiazide to a patient who has previously undergone sympathectomy. This usually is well tolerated, but if such a patient is elderly or has arteriosclerosis there is the possibility of precipitating a coronary or cerebrovascular occlusion if the hypotensive response is marked.

The example just cited could be called a "toxic effect" of chlorothiazide, since the net result is deleterious to the patient. But in a more real sense it is not a failing of the drug, whose purpose is to lower blood pressure, so much as it is a reflection on physicians who proceed thoughtlessly in a situation where wisdom cautions otherwise. The blame in this case is not with the drug but with the physician's judgment.

Similarly, the other so-called toxic reactions to chlorothiazide hold no surprises but are only extensions of its fundamental saluretic and kaluretic actions (fig. 2). The most common of all the "toxic reactions" is hypopotassemia. In patients with uncomplicated hypertension, reductions of serum potassium levels to 3 mEq. per liter is almost commonplace and, in experience at this laboratory, has not been attended by clinical manifestations of hypokalemia or by any evidences of renal damage. The situation in a cardiac patient, on the other hand, has been quite different. Patients with resistant congestive heart failure appear to be potassium "losers," and the addition of chlorothiazide may tip the scale toward critical depletion. This clinical situation is further embarrassed by the fact that digitalis toxicity develops so readily in the presence of hypopotassemia. The first sign of trouble then may be the arrhythmias of digitalis intoxication.

Various measures may be taken to cope with this toxic development. The dosage of digitalis may be reduced or omitted, chlorothiazide may be given intermittently rather than continuously, or potassium supplements may be administered. I do not share the equanimity of other workers regarding the effectiveness of potassium supplements, since they may provide a false sense of security. Chlorothiazide is quite effective in removing excessive sodium in the diet and may do the same with potassium supplements. How much potassium is enough to raise the blood potassium level, and what happens when the patient forgets to take his supplement? These important questions need to be resolved, and it would seem advisable to supply an ample excess of 75 to 100 mEq. orally per day in all patients who develop hypokalemia. There is

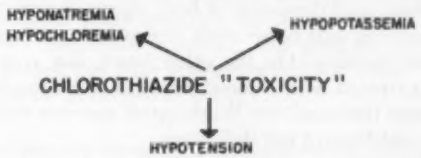


Fig. 2.—Reactions to chlorothiazide as extensions of its fundamental actions.

some evidence to suggest that the hypokalemia may be due to a secondary stimulation of aldosterone secretion.

In the patient who has congestive heart failure secondary to hypertension, it is usually possible to control the failure without digitalis after the blood pressure has been reduced and reaccumulation of edema prevented by chlorothiazide plus other hypotensive agents. There is no need to make a fetish of digitalis if it is harmful in a particular situation. A cautious trial of withdrawal after compensation has been restored will not subject the patient to any significant risk.

In the patient with congestive heart failure due primarily or completely to causes other than hypertension, it is our practice to continue digitalis therapy but to administer chlorothiazide intermittently (usually two days on treatment and two days off), thereby permitting nature to make its own compensations. Unfortunately, in patients with hypertension chlorothiazide must be taken daily, as the blood pressure rises promptly (within 24 to 48 hours) after the drug has been withdrawn.

By the same token, the physician should resist the temptation to give chlorothiazide for correction of hypertension or edema secondary to hyperadrenocorticism, either the naturally occurring varieties or the type induced by steroid treatment. The adrenal cortical hormones conserve sodium and waste potassium. Chlorothiazide increases the excretion of both. In the patient with potassium depletion and hyperadrenocorticism, the additional insult of chlorothiazide may precipitate severe hypokalemia. Similarly, protracted diarrhea, various renal tubular disorders, and ureterosigmoidostomy may in themselves produce potassium depletion and hence make chlorothiazide therapy dangerous. Fortunately, these are situations that rarely arise in the routine management of hypertensive patients.

It is surprising that hyponatremia and hypochloremia do not develop more frequently. There seem to be few authenticated cases, and these conditions have not been observed in this clinic. Once the labile pool of extracellular fluid has been skimmed off, chlorothiazide seems to become relatively ineffective in removing further sodium or chloride. Nevertheless, it would be adding insult to injury to give chlorothiazide in the presence of nephritis with salt loss, or of depletion of body stores of sodium or chloride, as can occur with protracted vomiting or severe diarrhea. On the other hand, last year patients treated with chlorothiazide at this clinic lived through the usual hot Washington summer without any evidences of salt deficiency.

One further word is required on the subject of "toxic reactions" to chlorothiazide. As organic renal damage progresses, the kidney vasculature loses its flexibility in adjusting to a reduced level of blood pressure. When blood pressure falls, glomerular filtration decreases. In the patients with elastic renal blood vessels, adjustments are made quickly so that filtration pressure is restored. But in the rigid vasculature of the patient with far-advanced nephrosclerosis or nephritis, these adjustments are poorly made, with the result that filtration pressure and filtration rate become lower and remain reduced. Such kidneys can ill afford this insult, since they depend on a high urine volume to hold uremia in check. As the filtration rate falls, oliguria develops and nitrogenous products accumulate in the blood.

In the presence of such renal damage and a high level of blood pressure, the physician truly must steer carefully between Scylla and Charybdis. If he aims toward hypotension, he must be aware of the possibility of uremia. But if he withholds therapy, his patient may be drawn further toward malignant hypertension. The only solution then is to proceed cautiously but firmly in the direction of moderating the level of blood pressure, watching scrupulously for oliguria, lightening treatment when this occurs, but pressing forward again watchfully when the danger has passed. Thus, judiciously the physician directs his course altering direction from time to time as prevailing conditions dictate. Few of these patients will be saved even under these circumstances. But the few who are makes the effort worthwhile.

Very often the level of blood urea nitrogen or nonprotein nitrogen will gradually rise. Even in these circumstances, I have persisted for a time, at least, hoping for the occasional instance in which the levels will stabilize and then gradually recede as the patient adjusts to the lower level of blood pressure.

Conclusions

The various complications to chlorothiazide therapy are not common in general practice, but awareness will aid in their prevention. Actually, the good produced by chlorothiazide far outweighs its harm. The discovery of this agent represents a therapeutic advance of considerable significance. The patient with uncomplicated hypertension who does not have congestive heart failure, renal failure, or steroid-induced hypertension has little to fear and much to gain from the use of this drug.

The goal of complete control of elevated blood pressure grows ever nearer. Will this prevent the organic complications that produce morbidity and mortality? I believe it will, but only time and thoughtfully planned studies will provide the final answer.

References

1. Freis, E. D., and Wilson, I. M.: Potentiating Effect of Chlorothiazide (Diuril) in Combination with Antihypertensive Agents: Preliminary Report, M. Ann. District of Columbia **26**:468; 516 (Sept.) 1957. Hollander, W., and Wilkins, R. W.: Chlorothiazide: New Type of Drug for Treatment of Hypertension, Boston M. Quart. **8**:69-75 (Sept.) 1957.

2. Freis, E. D.; Wanko, A.; Wilson, I. M.; and Parrish, A. E.: Chlorothiazide in Hypertensive and Normotensive Patients, Ann. New York Acad. Sc. **71**:450-455 (Feb. 3) 1958.

3. Wilkins, R. W.; Hollander, W.; and Chobanian, A. V.: Chlorothiazide in Hypertension: Studies on Its Mode of Action, Ann. New York Acad. Sc. **71**:465-472 (Feb. 3) 1958. Hollander, W.; Chobanian, A. V.; and Wilkins, R. W.: Studies on Antihypertensive Action of Chlorothiazide, abstracted, Clin. Research **6**:21-22 (Jan.) 1958.

4. Tapia, F. A., and others: Enhanced Effectiveness of Ganglion Blocking Agents in Hypertensive Patients During Administration of Saluretic Agent (Chlorothiazide): Preliminary Communication, Lancet **2**:831-833 (Oct. 26) 1957.

5. Wanko, A., and Freis, E. D.: Altered Vascular Responsiveness Following Chlorothiazide or Mercurial Diuresis in Normotensive Subjects, submitted as an abstract to the 31st Annual Meeting of the American Heart Association.

6. Wilson, I. M., and Freis, E. D.: Extracellular Fluid and Plasma Volume Changes in Nonedematous Hypertensive Patients After Prolonged Treatment with Chlorothiazide, submitted as an abstract to the 31st Annual Meeting of the American Heart Association.

CHLOROTHIAZIDE (DIURIL)—A NEW, NONMERCURIAL, ORALLY GIVEN DIURETIC

John W. Keyes, M.D.
and
Franz J. Berlacher, M.D., Detroit

The diuretic effects of chlorothiazide were studied in four groups of patients with various degrees of congestive heart failure. All but 2 of the 50 patients were fully digitalized, and all were being kept on diets yielding 1 Gm. of sodium chloride per day. The usual dose for long-term therapy was found to be 250 or 500 mg. given thrice daily by mouth at roughly six-hour intervals for three or four consecutive days a week. Some individualization was necessary. Three case histories illustrate the gratifying results obtained in some patients; a fourth illustrates the fact that patients resistant to mercurial diuretics are generally resistant to chlorothiazide also. Under the conditions of this study, with the use of ammonium chloride and potassium chloride when indicated, no serious electrolyte imbalance occurred, and patients remained free from gastrointestinal and neurological symptoms of toxicity.

Clinical observation concerning a new, nonmercurial, orally given diuretic, designated by the generic name chlorothiazide,[1] constitutes this report. It is designated chemically as 6-chloro-7-sulfamyl-1, 2,4-benzothiadiazine-1,1-dioxide.

It is not primarily a carbonic anhydrase inhibitor [2] but seems to possess the factor of exerting considerable influence on the renal tubular transport of electrolytes, causing a marked decrease in the reabsorption of sodium and chloride and, to a lesser degree, potassium and bicarbonate.[3] The loss of sodium is apparently equal, mol for mol, to that of chloride.[3a] When given in large doses, it is reported [3a] that bicarbonate is lost in "appreciable" amounts, though never to the point of metabolic acidosis as in the case with carbonic anhydrase inhibitors. Smaller but effective diuretic doses produce only relatively minor loss of bicarbonate.

The drug is rapidly and well absorbed when given by the oral route, with onset of action within two hours and a duration of action of somewhat less than 12 hours.[4] The pattern of electrolyte excretion, with marked chloruretic effect and rapid onset, suggested a similarity to mercurial diuretics and, further, that pretreatment with ammonium chloride might enhance its effect and protect the patient from hypochloremic alkalosis.

Methods

Chlorothiazide (Diuril) was employed in several different groups of patients. All were kept on diets with 1 Gm. of sodium chloride, and all but two were fully digitalized. All other diuretic agents were withdrawn except ammonium chloride. There was a total of 50 patients in the study, which covered a period of seven months. All patients were in congestive failure at the time of drug administration. Since the completion of the study, an additional six months of use has occurred, making in all a 13-month period during which the drug has been employed.

Since chlorothiazide was reported [3] to cause a marked chloruresis, several patients were studied by a check of serum electrolyte disturbances. As the study progressed, routine determinations appeared unnecessary, since apparent protection against hypochloremia could be provided simply by ammonium chloride administration. The latter was given in 1-Gm. doses four times daily on three to four consecutive days per week, as with the mercurial diuretics. The substitution of enteric coated potassium chloride for ammonium chloride, 1 Gm. given three times daily for three days, may more completely protect the patients from chloride and potassium loss. The use of ammonium chloride, while it did protect the patient from hypochloremia and alkalosis, did not materially add any diuretic effectiveness and did not appear to enhance the effect of chlorothiazide. As of this time, we feel the use of enteric coated potassium chloride probably represents the drug of choice in place of ammonium chloride, as one can feel that chloride and potassium replacement will occur with a single medication.

Chlorothiazide was administered in divided doses ranging from 250 to 1,500 mg. per 24 hours, three to seven days a week. The average dose for long-term therapy was found to be 250 or 500 mg. given three times daily at roughly six-hour intervals. We observed that a greater diuretic response was obtained by giving chlorothiazide on a divided dosage schedule, two to three times a day, than by a single large dose in the morning and over three to four consecutive days each week. We observed that most patients could be kept at "dry" stable weights with three or four consecutive days of chlorothiazide administration; continuous daily administration did not seem necessary except in an occasional patient in whom control was more difficult.

From the Adult Cardiology Division, Department of Medicine, Henry Ford Hospital.

Read in the Symposium on the Newer Diuretics—Especially Chlorothiazide—Indications and Reported Use before the Section on General Practice at the 107th Annual Meeting of the American Medical Association, San Francisco, June 26, 1958.

Individual dosage adjustment was, of course, necessary, since all patients did not respond in a similar manner, some requiring as much as 1,500 mg. per day and others as little as 250 mg. one day a week. The usual initial dose was 250 mg. given three times a day for three or four consecutive days a week. Larger doses gave no greater diuresis than smaller effective doses, and we felt, further, that it was important to use the smallest possible effective dose for long-continued therapy. Subsequent dosage was determined by diuretic response and further need of therapy. There was no evidence of the loss of effectiveness of chlorothiazide in the presence of ammonium chloride acidosis.[5]

The onset of diuresis was more gradual than with a parenterally given mercurial agent, but continued in a more sustained and less vigorous manner, so that practically all patients agreed it did not cause them the same degree of muscular discomfort and marked frequency of urination, with the consequent frequent loss of sleep, seen with the shorter and more violent action of a parenterally given mercurial diuretic.

Results

Group 1 consisted of patients seen for the first time in congestive failure in whom chlorothiazide was administered in lieu of a mercurial diuretic. There were five patients in this group, three with arteriosclerotic heart disease, one with hypertensive cardiovascular disease, and one with rheumatic heart disease.

The average dosage of chlorothiazide was 250 mg. given three times a day for three days. The average weight loss was 6 lb. (2.7 kg.) at the end of a three-day period.

In group 2 were included patients in chronic congestive heart failure who required only occasional mercurial injections or were taking, orally, mercurial or nonmercurial diuretics. There were 25 patients, 9 with arteriosclerotic heart disease, 3 with hypertensive cardiovascular disease, and 13 with rheumatic heart disease.

Follow-up studies were done for periods of six weeks to four months, with an average of two and one-half months. The average dosage of chlorothiazide was 250 to 500 mg. given three times a day for three consecutive days each week. One patient received as little as 125-250 mg. one day a week. The average weight loss was 5 lb. (2.3 kg.). The usual loss was 3-8 lb. (1.3-3.6 kg.) at the end of each course.

No patient failed to be controlled as well as with mercurials given by oral or parenteral route or with orally given nonmercurials combined with mercurial agents. Three patients were improved much more than with the mercurial program. Two patients who had regularly received nonmercurial, orally given diuretics and, occasionally, mercaptomerin promptly lost 5-8 lb. when placed on chlorothiazide therapy. One patient who had been on therapy with an orally given mercurial agent lost 5 lb. in four days after use of chlorothiazide.

Group 3 included patients in chronic congestive heart failure who required regular injections of mercurial agents. There were 17 patients in this group, 11 with arteriosclerotic heart disease, 1 with hypertensive cardiovascular disease, and 5 with rheumatic heart disease.

Follow-up studies were done over periods of two to five months. The average dosage was 250 mg. given three times daily to 500 mg. given twice or three times daily for three consecutive days each week. Previous diuretic therapy had been with mercaptomerin alone or in combinations with chlormerodrin or nonmercurial, orally given diuretics. The average frequency of administration of mercurials by the parenteral route was every 7 to 14 days. After chlorothiazide therapy was begun, the average weight loss was 6 lb. and one patient lost 12 lb. (5.4 kg.).

No failures in treatment occurred. Every patient was as well controlled as, and a great deal more smoothly than, with the previous diuretic schedule.

In group 4 were patients in a refractory state of congestive failure in whom regular mercurials did not produce satisfactory results. There were three such patients, all with arteriosclerotic heart disease. All were unimproved on the mercurial program, and all were unimproved on chlorothiazide therapy. One patient noted some improvement after a return to mercurial therapy.

Report of Cases

Case 1 (group 1).—A 50-year-old man was admitted to the Henry Ford Hospital in congestive failure from arteriosclerotic and hypertensive heart disease. He had been on therapy with digitoxin, 0.2 mg. per day, and a low-salt diet. After admission, with no change in therapy, his weight remained stable for three days. On the morning of the fourth day, therapy with 500 mg. of chlorothiazide given twice daily was begun. At the end of two days, he had lost 7 lb. (3.2 kg.) in weight and all signs of congestive heart failure had cleared except for questionable minimal hepatic enlargement. He was continued on chlorothiazide therapy for three more days, with a further loss of 1 lb. (0.5 kg.) in weight. Serum sodium, potassium, chloride, and carbon dioxide levels were determined at this time, and all were within normal limits. He was then parenterally given 2 cc. of a mercurial to see if any further diuresis could be obtained. There was no change in weight or physical findings.

He was discharged to the outpatient department on maintenance therapy with digitoxin and a 1-Gm. salt diet, and follow-up examinations were done at about monthly intervals, with the requirement of parenterally given mercurials. After three months he showed evidence of increasing congestive failure. Chlorothiazide therapy was begun again, 250 mg. given three times daily three days a week, and ammonium chloride, 1 Gm. given four times daily the other four days of the week. Within 48 hours of institution of chlorothiazide therapy, he lost 4 lb. (1.8 kg.) in weight and his failure cleared. He has remained out of failure on this program for three months and has required no subsequent therapy with mercurial agents.

Case 2 (group 2).—A 44-year-old woman with rheumatic heart disease, auricular fibrillation, and chronic congestive failure had been on therapy with digitoxin, ammonium chloride, a 1-Gm. salt diet, chlormerodrin given five days a week, and, occasionally a parenterally given mercurial. When chlorothiazide therapy was begun, 250 mg. given three times a day three days a week, with 4 Gm. of ammonium chloride

the other four days of the week, she lost 5 lb. in weight within four days. Symptoms were relieved, and she has maintained her improvement for more than two months with no need for chlormerodrin or any parenterally given mercurial agent.

CASE 3 (group 3).—A 70-year-old woman, treated at the Henry Ford Hospital for many years, had hypertensive cardiovascular disease, auricular fibrillation, and chronic congestive failure. She had been on therapy with gitalin, 0.5 mg. per day, a 1-Gm. salt diet, and rauwolfia (Raudixin), 100 mg. twice daily, and for many months had required parenteral injections of mercurial agents every 7-10 days with ammonium chloride given intermittently. Even on this program she had congestive failure periodically, with orthopnea, paroxysmal nocturnal dyspnea, and edema, usually beginning a few days prior to each injection of the mercurial. Chlorothiazide therapy was begun, 250 mg. given three times a day, three days a week and ammonium chloride the other four days of the week. On this program, she did not need any mercurial diuretic for five months and has had no orthopnea, paroxysmal nocturnal dyspnea, or edema for the first time in two or three years. It may be added that for 13 months the same continued satisfactory response has been seen.

CASE 4 (group 4).—A 65-year-old man had chronic, severe, intractable congestive failure and auricular fibrillation on an arteriosclerotic basis. He had been on therapy with digitoxin, 0.625 mg. daily, a 1-Gm. salt diet, intermittently given ammonium chloride and parenterally given mercurials, and, in the past, chlormerodrin and acetazolamide. The condition had not been well controlled with any of these programs. Recently, he had become almost completely resistant to even parenterally given mercurials. Therapy was begun with 500 mg. of chlorothiazide given twice daily three days a week, with ammonium chloride given intermittently, without response. Dosage was increased finally to 500 mg. given three times a day every day, but still this produced no satisfactory response. To this program was added parenterally given mercurials, 2 cc. every three to seven days, but with only minimal improvement—that is, a weight loss of 3 to 4 lb. with each injection. However, he would regain this weight within 24 to 72 hours. In summary, it was felt that chlorothiazide was of no significant benefit to this patient.

Toxicity

Our studies to date indicate chlorothiazide has little or no toxicity; however, as with all new drugs, alertness for signs of toxicity must be maintained. Its greatest potential danger seems to be the possibility of producing hypochloremia, hypopotassemia, or low sodium level syndromes, exactly as with mercurials. No serious electrolyte imbalance occurred in this study.

Patients with kidney disease and those with liver function impairment should be watched closely. The drug is apparently primarily excreted by the kidney, being eliminated completely within 24 to 48 hours.[4] However, in dogs subjected to nephrectomy and given chlorothiazide, considerable quantities could be recovered from the biliary tract.[3a]

Nausea or vomiting did not occur in any of our patients, the drug being exceedingly well tolerated. No neurological symptoms, such as headache, paresthesias, or peripheral neuritis, were found. Skin eruptions were not encountered; hemorrhagic and renal disturbances were checked for but not present.[4] In short, no evidence of serious toxicity was discovered in any of the patients treated in this report. However, since the completion of the report, and in the additional six months of use of the drug, three cases of skin rash have been observed. One of these was a true morbilliform type of rash, similar to that seen with the use of sulfonamides. The other two were very fine macular rashes, erythematous in nature, promptly subsiding with discontinuance of therapy. In one case, the drug was readministered in a smaller dose without return of the rash. Since the drug is a compound related to the sulfonamides, this type of rash may be found in some patients. The exact incidence is not definitely known but probably is well under 2%.

We would like to state that it is advisable to respect the potential danger of this drug, as with the mercurials, in treatment of patients with salt depletion and to be cautious in using it without the replacement of chlorides and potassium by means of ammonium chloride or potassium chloride where the latter can be safely administered. In those cases in which sodium or potassium depletion may occur, as in serious liver disease or in the long-continued use of steroid therapy, hypopotassemia may occur earlier than is the usual case, since the cation of excretion with chlorothiazide is chiefly sodium and, where this is not present, the next available cation, potassium, will be excreted in fairly large quantities. In patients who are digitalized, this hypopotassemia may potentiate the digitalis effect, resulting in digitalis intoxication and its subsequent manifestations.

Comment

Chlorothiazide appears to represent a significant advance in the diuretic management of patients with congestive heart failure, approaching the effectiveness of parenterally administered mercurials; its decided advantages are (1) effective oral administration, (2) apparent lack of toxicity, (3) high patient acceptance, (4) sustained diuretic action over prolonged periods of use (months) without apparent development of tolerance to the drug, without necessity of increasing dosage, and, therefor, with more even control of failure than seen with intermittent parenterally administered mercurials, and (5) fairly rapid onset and peak of action.

Summary

Chlorothiazide (6-chloro-7-sulfamyl-1,2,4-benzothiadiazine-1,1-dioxide) was found to be an extremely effective, orally given, nonmercurial diuretic agent resembling most closely, pharmacologically, the mercurial diuretics. Therapeutic dosage varied from 250 to 1,500 mg. given daily with apparent increased effectiveness on a divided-dose schedule. The usual maintenance dose was 500 to 1,000 mg. given three to four consecutive days of each week, alternating with ammonium chloride for its antihypochloremic-alkalosis effect, or the concurrent use of postassium chloride, 600 mg. given four times daily to protect from hypochloremia and hypopotassemia.

Its effectiveness was not diminished with constant administration, even over a period of several months. Chlorothiazide was found to be an effective replacement for regular orally or parenterally given mercurial agents and resulted in a smoother control of failure than that seen with intermittently, parenterally given mercurials in the majority of cases. It was also effective in short-term diuretic action (one to three days). In our limited experience, it was of no value in intractable, mercurial-resistant cases.

2799 W. Grand Blvd. (2) (Dr. Keyes).

The chlorothiazide used in this study was supplied as Diuril by the Merck, Sharp & Dohme Research Laboratories, Division of Merck & Co., Inc., Philadelphia.

References

1. Novello, F. C., and Sprague, J. M.: Benzothiadiazine Dioxides as Novel Diuretics, Communications to the Editor, J. Am. Chem. Soc. **79**:2028-2029 (April 20) 1957.
2. Ford, R. V.; Moyer, J. H.; and Spurr, C. L.: Clinical and Laboratory Observations on Chlorothiazide (Diuril): Orally Effective Nonmercurial Diuretic Agent, A. M. A. Arch. Int. Med. **100**:582-596 (Oct.) 1957.
3. (*a*) Beyer, K. H.: Chlorothiazide—Preclinical Evaluation as Saluretic Agent, Merck Institute Report, West Point, Pa., Merck & Co., Inc., June 10, 1957. (*b*) Ford, R. V.; Moyer, J. H.; Handley, C.; and Spurr, C. L.: Chlorothiazide (Diuril), Orally Effective Nonmercurial Diuretic Agent, M. Rec. & Ann. **51**:376-378 (April) 1957. (*c*) Reference 2.
4. References 2 and 3*a*.
5. Maren, T. H.: Carbonic Anhydrase Inhibition: IV. Effects of Metabolic Acidosis on Response to Diamox, Bull. Johns Hopkins Hosp. **98**:159-183 (March) 1956.

CHLOROTHIAZIDE AND PREMENSTRUAL TENSION

Edwin C. Jungck, M.D., William E. Barfield, M.D.
and
Robert B. Greenblatt, M.D., Augusta, Ga.

Diuretics have been used with some success in control of the premenstrual tension syndrome. This study shows that chlorothiazide is particularly useful in controlling the edema and breast swelling often associated with premenstrual tension and, to a lesser degree, the tension itself.

The premenstrual tension syndrome is composed of many symptoms, any or all of which may be found in an individual patient. Most women note some changes the week before their menses, usually insufficient to require medical attention. The principal complaints noted at that time are nervousness, tension, swelling, headaches, depression, and breast soreness and turgidity; in severe form, these symptoms may progress to antisocial behavior and psychosexual abnormalities. During the premenstruum, some women exhibit nymphomaniacal tendencies, while others may have complete revulsion for the sex act. They often engage in domestic quarrels and become so distracted and distraught that their work efficiency is considerably lessened. This condition is of great importance to industries in which large numbers of women are employed, since efficiency drops, use of sick leave increases, and worker productivity is decreased.

The principal complaints of premenstrual tension noted a week prior to menses are nervousness, tension, swelling, headaches, depression, and breast soreness and turgidity; in severe form, these symptoms may progress to antisocial behavior and psychosexual abnormalities. Symptoms of the premenstrual tension syndrome may be due to latent edema, since many of the patients without apparent swelling were benefited by use of the diuretics alone. The usefulness of diuretics for control of premenstrual tension is well established. Chlorothiazide, in doses of 500 to 1,000 mg. administered daily for 7 to 10 days before menses, was given to 50 women with complaints referable to the premenstrual tension syndrome. Of the 50 patients, 33 complained of swelling. All of these patients showed an excellent response to chlorothiazide, with complete relief from their edema. Breast tenderness was a problem for eight patients, and, in each instance, the tenderness was relieved by chlorothiazide therapy. Headache was a presenting symptom in four patients, two of whom were relieved and two of whom noted no change while on chlorothiazide therapy.

From the Department of Endocrinology, Medical College of Georgia.

Read in the Symposium on the Newer Diuretics—Especially Chlorothiazide—Indications and Reported Use before the Section on General Practice at the 107th Annual Meeting of the American Medical Association, San Francisco, June 26, 1958.

The etiology of premenstrual tension is still not clear. Many theories have been advanced: menstrual toxins,[1] excessive circulating estrogens,[2] deficient progesterone production,[3] excessive antidiuretic hormone,[4] allergy to the ovarian hormones, hypoglycemia,[5] and vitamin B deficiency.[6] Since the symptoms are so variable in kind and intensity, the only major hypothesis which can explain the syndrome is a dysfunction of the hypothalamic control of the autonomic nervous system.[7] What might be responsible for this dysfunction remains to be solved.

Nevertheless, premenstrual tension is an important and ever-present complaint for which relief is sought. Many different types of medicaments have been advocated for this syndrome: B-complex vitamins to enhance estrogen metabolism by the liver, estrogens to prevent ovulation, progestational substances to supplement endogenous progesterone, sedatives to combat the nervousness, testosterone to antagonize endogenous estrogen, and diuretics to prevent excess salt and water retention, to name a few. All of these have their adherents and are helpful in some cases. At present, the most widely used agents for control of premenstrual tension are the diuretics.

The usefulness of diuretics for control of premenstrual tension is well established. When edema is apparent as one of the major symptoms during the premenstruum, diuretics, used for 7 to 10 days before the onset of menses, are effective in preventing fluid accumulation. In some patients, the edema may be latent in character and swelling not be obvious; in them, control of salt and water excretion may be accompanied by gratifying relief from the other symptoms of the syndrome.

Until recently, the available diuretics were of three main types: those that increased glomerular filtration, such as caffeine; those that increased tubular urea excretion, such as ammonium chloride; and those that decreased tubular reabsorption of water by inhibition of carbonic anhydrase, such as acetazolamide. Adequate response with caffeine and ammonium chloride requires administration at frequent intervals throughout the day, causing some inconvenience to the patient and often resulting in missed doses and, thus, decreased effectiveness. The carbonic anhydrase inhibitors become less effective after four to five days' continuous use, necessitating an interrupted schedule of administration for optimum effect. Coincident with interruption of the schedule, swelling may occur and symptoms become troublesome until the diuretic therapy can be resumed.

Since the newer diuretic, chlorothiazide, can be given continuously without the development of resistance, it has been tried for control of premenstrual tension in 50 women.

Results with Chlorothiazide

Chlorothiazide, in doses of 500 to 1,000 mg. administered daily for 7 to 10 days before menses, was given to 50 women with complaints referable to the premenstrual tension syndrome. To evaluate the effectiveness of this diuretic, the syndrome was broken down into four symptoms and the patients were judged on their relief from each symptom: nervousness and tension, swelling, breast soreness, and headaches (see table). An individual patient might have any or all of these symptoms.

Severe nervousness and tension was a symptom in 42 patients, of whom 21 had satisfactory relief with chlorothiazide alone. Addition of a mild sedative or tranquilizer, such as the barbiturate vinbarbital (Delvinal), meprobamate (Equanil), or promazine (Sparine) hydrochloride, usually alleviated this symptom in the patients in whom chlorothiazide alone was not satisfactory.

Of the 50 patients, 33 complained of swelling. All of these patients showed an excellent response to chlorothiazide, with complete relief from their edema. Breast tenderness was a problem for eight patients, and, in each instance, the tenderness was relieved by chlorothiazide therapy. Headache was a presenting symptom in four patients, two of whom were relieved and two of whom noted no change while on chlorothiazide therapy.

Results of Chlorothiazide Administration in Fifty Patients with Premenstrual Tension

	Symptom							
	Tension		Swelling		Breast Soreness		Headache	
Daily Dose,* Mg.	Relieved, No.	Not Relieved, No.	Relieved, No.	Not Relieved, No.	Relieved, No.	Not Relieved, No.	Relieved, No.	Not Relieved, No.
500	6	11	12	0	4	0	0	0
1,000	15	10	21	0	4	0	2	2
Total	21	21	33	0	8	0	2	2

* Given 7-10 days before menses.

Comment

The premenstrual tension syndrome is of widespread importance, affecting most women to some extent. When it is sufficiently severe to require medical help, relief may be obtained from a great variety of therapeutic regimens.

Diuretics in some form have been used with moderate success for a long time in the treatment of this condition. Ammonium chloride, by increasing the urea excretion and altering the acidity of the urine, is one of the most popular diuretics and has met with variable degrees of success. With the advent of the newer diuretics, more uniform results have been obtained.

The major disadvantage of ammonium chloride is that its administration must be repeated at frequent intervals each day to attain an optimal re-

sponse, causing considerable inconvenience to the patient and often resulting in missed or irregularly spaced doses. Acetazolamide and other carbonic anhydrase inhibitors maintain their peak effectiveness for only four to five days, after which some swelling may occur. Chlorothiazide, on the other hand, continues to be effective for a prolonged period of time without the development of tolerance.

In the series of patients reported here who complained of premenstrual tension, chlorothiazide, given in a dosage of 500 to 1,000 mg. daily for the last 7-10 days before menses, was uniformly successful in preventing peripheral edema and breast tenderness. The nervousness and tension was relieved in one-half of these patients, whereas the balance of the patients noted no improvement. However, combining the chlorothiazide with a mild tranquilizer was effective in controlling the tension of those patients who noted no relief from chlorothiazide alone.

Premenstrual headaches were relieved in two of four patients with this complaint by chlorothiazide alone. The other two required the addition of tranquilizers.

This study supports the view that the symptoms of the premenstrual tension syndrome may be due to latent edema, since many of the patients without apparent swelling were benefited by use of the diuretics alone. On the other hand, it supports the contention that an alteration in salt and water metabolism is not the primary problem in all patients with premenstrual tension, since relief of all apparent swelling had no effect on the tension, nervousness, and headaches of half the patients with these complaints. This serves to reemphasize the fact that no single regimen of treatment is successful in all cases of premenstrual tension; treatment must be individualized to the presenting symptoms.

Summary

A newer, orally given diuretic, chlorothiazide, has been utilized in the treatment of 50 women complaining of premenstrual tension in a dose of 500 to 1,000 mg. daily for 7 to 10 days before menses. The effectiveness of its use was assessed by analysis of the relief of four major complaints referable to this condition, any or all of which may have been present in an individual patient.

Chlorothiazide is an excellent agent for relief of swelling and breast soreness associated with the premenstrual tension syndrome, since all patients with these complaints were completely relieved.

Where tension, nervousness, and headaches are major factors, chlorothiazide may provide relief; approximately half of the patients in this series were benefited, the others noting no improvement. Mild sedatives or tranquilizers given along with chlorothiazide were helpful in resistant cases.

1467 Harper St. (Dr. Jungck)

The chlorothiazide used in this study was supplied as Diuril through Dr. John R. Beem of Merck, Sharp & Dohme, Division of Merck & Co., Inc., Philadelphia.

References

1. Macht, D. I.: Further Historical and Experimental Studies on Menstrual Toxin, Am. J. M. Sc. **206:**283-305 (Sept.) 1943.

2. Frank, R. T.: Hormonal Causes of Premenstrual Tension, Arch. Neurol. & Psychiat. **26:**1053-1057 (Nov.) 1931.

3. Israel, S. L.: Premenstrual Tension, J. A. M. A. **110:** 1721-1723 (May 21) 1938.

4. Thomas, W. A.: Generalized Edema Occurring Only at Menstrual Period, J. A. M. A. **101:**1126-1127 (Oct. 7) 1933.

5. Morton, J. H.: Treatment of Premenstrual Tension, Internat. Rec. Med. & GP Clin. **166:**505-510 (Nov.) 1953. Morton, J. H., and others: Clinical Study of Premenstrual Tension, Am. J. Obst. & Gynec. **65:**1182-1192 (June) 1953.

6. Biskind, M. S.; Biskind, G. R; and Biskind, L. H.: Nutritional Deficiency in Etiology of Menorrhagia, Metrorrhagia, Cystic Mastitis, and Premenstrual Tension: Further Observations on Treatment with Vitamin B. Complex, Surg. Gynec. & Obst. **78:**49-57 (Jan.) 1944.

7. Greenblatt, R. B.: Premenstrual Tension Syndrome, GP **11:**66-68 (March) 1955. Berman, L. W., and Greenblatt, R. B.: Influence of Compounds Clinically Effective in Treatment of Premenstrual Tension on Electrolyte Excretion and Urinary Output of Male Albino Rat, J. M. A. Georgia **43:** 1031-1034 (Dec.) 1954. Greenblatt, R. B.: Syndrome of Major Menstrual Molimina, with Hypermenorrhea Alleviated by Testosterone Propionate, J. A. M. A. **115:**120-121 (July 13) 1940.

TREATMENT OF CANCER.—Advances in the treatment of cancer have been made in all the major fields of therapy, but critical assessment of the results obtained indicates that there is little justification for complacency. Although much has been achieved in affording the patient good palliation and enabling him to live in comfort with the disease, the long-term survival or "cure" rates have shown little improvement. Perhaps the most significant advance has been the clinician's appreciation that larger operations and more complex and powerful therapy machines do not, of necessity, confer better treatment on the patient. Assessment of the differing biological potentials of each individual cancer has led to a more careful selection of the appropriate form of treatment. Surgeon, radiotherapist, and chemotherapist are appreciating that the future of cancer therapy lies at the cellular or intracellular level and are directing their efforts and attention accordingly.—A. G. Jessiman, F.R.C.S., and F. D. Moore, M.D., Advances in the Treatment of Cancer, *The Practitioner*, October, 1958.

MORPHOLOGY AND RACIAL DISTRIBUTION OF FATAL COCCIDIOIDOMYCOSIS

REPORT OF A TEN-YEAR AUTOPSY SERIES IN AN ENDEMIC AREA

Robert W. Huntington Jr., M.D., Bakersfield, Calif.

The generalization that dark-skinned ethnic groups are particularly susceptible to infectious granulomas was tested in a study of 4,989 autopsies performed during a 10-year period in an area where coccidioidomycosis and tuberculosis were both constantly present. Difficulties were encountered in classifying the subjects as to race and also in settling diagnostic questions in cases of arrested or inactive granulomatous lesions, but in persons who died with coccidioidomycosis it was always easy to demonstrate the organisms in the lesions. Acute forms of coccidioidomycosis, with massive suppuration and overwhelming dissemination, occurred in Negroes, Caucasians, and Mexicans; so did the subacute or chronic meningitic forms without obvious visceral involvement. There was evidence that all three groups were living in unfavorable environments. Nevertheless the incidence of fatal disease showed some striking differences. The incidence of fatal coccidioidomycosis was only slightly higher in Mexicans than in Caucasians, but that in Negroes was 10 times as high as in Caucasians. The incidence of fatal tuberculosis was only slightly higher in Negroes than in Caucasians, but in Mexicans it was very much higher. A group of Filipinos living in particularly bad circumstances appeared to be particularly vulnerable to both diseases. The supposed generalization, therefore, did not hold, and it is evidently important to specify which ethnic group and which infectious granuloma is concerned.

The meticulous study of Forbus and Bestebreurtje [1] and the admirable review by Fiese [2] suggest the desirability of further data on the morbid anatomy and race-sex distribution of fatal coccidioidomycosis. Observations on the histopathology of coccidioidomycosis have been presented elsewhere.[3] In view of the increasing national interest in the disease, it seemed appropriate to analyze an experience with fatal cases studied at autopsy in a civilian hospital in an endemic area with reference to morphology and race distribution. Data on fatal tuberculosis in the same autopsy population are presented for comparison and contrast.

Methods and Material

The Kern County General Hospital has 500 beds for acutely and 200 for chronically indigent sick persons of the southernmost county of the San Joaquin Valley. It is affiliated with the county tuberculosis sanitarium in a neighboring community. Figures for admissions for six years (July, 1951, to July, 1957) total 63,015—26,125 male and 36,890 female. A great many of the latter were admitted to the obstetric service. The figures by race are as follows: Caucasian, 40,163; Mexican, 11,958; Negro, 10,142; and others, 752. The conclusion as to race was based on the individual's statement plus data on parents and their place of birth. Mexican, I believe, can be defined as a person with a Spanish name with some Spanish blood but largely American Indian (Amerind) parentage, whether born in California, Texas, Arizona, New Mexico, or old Mexico. Unfortunately, the census statistics list most Mexicans as Caucasian, despite the importance of the Amerind strain.

The pathology laboratory of the hospital was under the direction of Dr. J. D. Kirshbaum from late 1946 to early 1949 and has been supervised by myself since April, 1950. From Jan. 1, 1947, to Dec. 31, 1956, 4,989 postmortem examinations were done. About one-third of these were done by request of the coroner on persons who died outside the hospital. However, many of these subjects had prior county hospital records, and most of them belonged to the indigent rather than the affluent class. Supplementary data on the race of these subjects were obtained from the police and the coroner when necessary.

Of the 4,989 subjects in the series, 3,383 were males and 1,606 females. The preponderance of males reflects the generally observed higher male mortality. In this area there is, perhaps, an unusual number of unattached males who take very poor care of themselves. Thus, for example, the Filipino colony at the northern end of the county is almost entirely male. Caucasian subjects numbered 3,558 (2,471 male and 1,087 female); Mexican, 629 (369 male and 260 female); Negro, 667 (431 male and 236 female); Filipino, 58 (all male); and other or unidentified races, 77 (54 male and 23 female).

Autopsy procedure has included microscopic study of any gross lesions and routine sections of major viscera even in the absence of gross lesions. Hotchkiss-McManus and acid-fast stains and cultures on Sabouraud's and Petragnini's mediums have been utilized freely.

From the laboratories of the Kern County General Hospital, Bakersfield, Calif., and the Department of Pathology, University of Southern California School of Medicine, Los Angeles.

In none of the persons who died from coccidioidomycosis was there difficulty in demonstrating the organisms in the lesions. In a few with tuberculosis, antibiotic treatment insufficient to arrest the disease interfered with the demonstration of Mycobacterium tuberculosis post mortem. However, in all listed as having fatal tuberculosis, M. tuberculosis was demonstrated some time during the course of the disease; usually, it was found abundantly in tissue, at postmortem examination.

With arrested or inactive granulomatous lesions, the differential etiological diagnosis is frequently impossible. A solitary inactive subpleural granuloma showing spherules on wet mount or on section stained with hematoxylin-eosin or Hotchkiss-McManus stains can confidently be classed as coccidioidal, even though such lesions have not yielded viable organisms on culture.[2] A lesion of similar appearance but showing M. tuberculosis on section, smear, or culture can be classed as tuberculous. However, a great many such lesions show neither fungi nor M. tuberculosis. No attempt has been made, therefore, to compile figures for nonfatal tuberculosis, while those for nonfatal coccidioidomycosis are presented with emphasis on their incompleteness.

Results

After careful review, 63 deaths were attributed to coccidioidomycosis. One was due to hemorrhage from a chronic cavity. A Negro woman who had refused surgery died at home. Cultures of sputum had shown coccidioides immitis, and postmortem cultures of tissue were likewise positive. Sections showed the organisms to be largely in the mycelian phase. Two deaths were due to acute suppurative coccidioidal pneumonitis without evident dissemination. In the remaining 60 patients the disease had spread beyond lungs, pleura, and thoracic lymph nodes, i. e., it was disseminated. Meningitis was demonstrated in 39 of these. However, it was the sole metapulmonary lesion in only 10. Twenty-nine showed meningitis plus visceral dissemination, and it may be well to emphasize that this, in my experience, has been the most common pattern of fatal coccidioidal disease. In 17 with fatal disseminated disease there was no meningitis and in 4 the meninges were not examined. Of the 60 subjects with disseminated disease, 8 had bulky psoas abscesses.

One important lesson was the fact that the antemortem diagnosis of fatal coccidioidomycosis is not infrequently missed, even in clinics in which a good deal of it is seen. Chronic coccidioidal meningitis and acute disseminated coccidioidomycosis with subcutaneous abscess or cutaneous granuloma are not often overlooked, but other forms may well be. Thus, the diagnosis was missed prior to autopsy in the two cases of acute pneumonitis without dissemination and in eight cases of disseminated disease. Coccidioidomycosis should, therefore, be suspected in any obscure febrile illness in a person who has been in an endemic area.

Of the 63 subjects, 11 were Caucasian male, 6 Caucasian female, 5 Mexican male, 23 Negro male, 12 Negro female, 4 Filipino male, and 2 other male (1 Chinese, 1 Amerind). Of the 17 subjects with disseminated disease without meningitis, who presumably died of the dissemination before they had time to get meningitis, 14 were Negro and 1 was Filipino. Of the eight with psoas abscess, one was a Caucasian male, one a Filipino, and the remainder Negroes (five male, one female). On the other hand, of the 10 with meningitis as the sole metapulmonary lesion, only 2 were Negro and 1 Filipino. Four were Caucasian. The data on fatal coccidioidomycosis are summarized in table 1.

TABLE 1.—*Incidence of Fatal Coccidioidomycosis in Autopsy Series, 1947-1956*

Population Group*	Meningitis, No.				Visceral Dissemination Without Meningitis, No.			Visceral Dissemination with Meningitis Not Determined, No.	Fatal Dissemination, Total	Fatal Acute Pneumonitis, No.	Fatal Cavity, No.	Total Fatalities	
	Lung Only	Without Psoas Abscess	With Psoas Abscess	Total	With Psoas Abscess	Without Psoas Abscess	Total					No.	%
Caucasian													
Male (2,471)	2	7	...	9	...	...	...	1†	10	1	...	11	0.455
Female (1,087)	2	3	...	5	...	1	1	...	6	...	...	6	0.552
Mexican													
Male (399)	2	1	...	3	...	1	1	1	5	...	...	5	1.36
Negro													
Male (431)	1	7	2	10	3	8	11	2	23	...	...	23	5.34
Female (236)	1	5	1	7	...	3	3	...	10	1	1	12	5.08
Filipino													
Male (58)	1	1	1	3	...	1	1	...	4	...	...	4	6.90
Other													
Male (54)	1‡	1§	...	2	...	...	...	...	2	...	...	2	...
Total (4,989)	10	25	4	39	3	14	17	4†	60	2	1	63	1.26

* Numbers in parentheses refer to group totals from which fatality percentages are derived (there were 260 Mexican females and 23 "other" females without findings relating to coccidioidomycosis; there were no Filipino females in study).
† One with psoas abscess.
‡ Amerind.
§ Chinese.

Data on 71 cases in which nonfatal coccidioidomycosis could be diagnosed are given in table 2. As already mentioned, the true incidence of inactive pulmonary residuals is certainly much higher than these figures indicate. At present, no way is known to recognize such residuals as coccidioidal in the absence of stainable spherules. Some comment on the 10 cases listed as "nonfatal disseminated" may be appropriate. In two of these cases, the diagnosis had been established during life, but no definite traces of it could be found at autopsy. A middle-aged Negro woman had a retropharyngeal abscess which yielded C. immitis on culture. She died, three and one-half years after diagnosis, of a carcinoma of the cervix. At autopsy, a subpleural granuloma showed neither acid-fast bacilli nor spherules. No other possible or probable coccidioidal lesions could be found. A 1-year-old Mexican boy had pneumonitis in 1948, followed by numerous skin and bony abscesses full of C. immitis and

TABLE 2.—*Incidence of Nonfatal Coccidioidomycosis in Autopsy Series, 1947-1956*

Population Group*	Inactive Pulmonary Disease, No.	Pneumonitis, No.	Cavitation, No.	Dissemination, No.	Total No.	Total %
Caucasian						
Male (2,471)	23	2	1	5	31	1.25
Female (1,087)	13	...	1	...	14	1.29
Mexican						
Male (369)	...	1	...	1	2	0.542
Female (260)	2	...	...	...	2	0.769
Negro						
Male (431)	12	...	...	1	13	3.02
Female (236)	4	...	2	1	7	2.97
Filipino						
Male (58)	...	...	...	2	2	3.45
Total (4,989)	54	3	4	10	71	1.42

* Numbers in parentheses refer to group totals, from which disease total percentages are derived (there were 77 in the "Other" category without findings relating to nonfatal coccidioidomycosis; there were no Filipino females in study).

a high complement-fixation titer. With treatment with a drug now believed of little value the lesions dried up. He died of sympathoblastoma with widespread metastases in 1952, and no coccidioidal residuals could be found at autopsy. Clearly, therefore, a person who has serious coccidioidal disease will not necessarily die of it. In six patients the metapulmonary lesions were few and apparently inactive. In two subjects the process might well have proved fatal if something else had not intervened first. In one of these (a Filipino male) the actual cause of death appeared to be chronic glomerulonephritis, while in the other (a Caucasian male) it was coronary artery disease.

In this series of 4,989 autopsies, there are 99 cases in which, on review, death is attributed to tuberculosis (table 3). Unfortunately, many of these autopsies were not done with the enthusiastic thoroughness which characterized those done to determine coccidioidomycosis. Thus, in too many instances the meninges were not examined. The disease appeared restricted to the lungs in 30, while there was evidence of dissemination in 69. Twenty-nine of the subjects were Caucasian male, 12 Caucasian female, 18 Mexican male, 23 Mexican female, 11 Negro male, 2 Negro female, 3 Filipino male, and 1 Amerind male. The disease appeared local-

TABLE 3.—*Incidence of Fatal Tuberculosis in Autopsy Series, 1947-1956*

Population Group*	Location: Disseminated, No.	Location: Localized Pulmonary, No.	Total Fatalities: No.	Total Fatalities: %
Caucasian				
Male (2,471)	14	15	29	1.17
Female (1,087)	8	4	12	1.10
Mexican				
Male (369)	16	2	18	4.88
Female (260)	19	4	23	8.85
Negro				
Male (431)	6	5	11	2.55
Female (236)	2	...	2	0.849
Filipino				
Male (58)	3	...	3	5.17
Other				
Male (54)	1†	...	1	...
Total (4,989)	69	30	99	1.98

* Numbers in parentheses refer to group totals, from which fatality percentages are derived (there were 23 "Other" females without findings relating to coccidioidomycosis; there were no Filipino females in study).
† Amerind.

ized in 15 of the Caucasian males and 5 of the Negro males. Localized disease was relatively less frequent in the other groups.

Comparative racial incidence of fatal coccidioidomycosis and fatal tuberculosis is given in table 4. It will be noted that the Filipinos appear decidedly vulnerable to both diseases and that coccidioidal deaths were much more frequent than tuberculous

TABLE 4.—*Comparison, by Race, of Incidence of Fatal Coccidioidomycosis and Fatal Tuberculosis in Autopsy Series, 1947-1956*

Population Group	Total in Group	Fatal Coccidioidomycosis: No.	Fatal Coccidioidomycosis: %	Fatal Tuberculosis: No.	Fatal Tuberculosis: %	Ratio (%)
Caucasian						
Male	2,471	11	0.455	29	1.17	38.0
Female	1,087	6	0.552	12	1.01	50.0
Mexican						
Male	369	5	1.36	18	4.88	27.8
Female	260	...	...	23	8.85	...
Negro						
Male	431	23	5.34	11	2.55	209.0
Female	236	12	5.08	2	0.849	600.0
Filipino						
Male	58	4	6.90	3	5.17	133.0
Other (male)	54	2*	3.70	1†	1.85	...
Series Total	4,989	63	1.26	99	1.98	63.6

* 1 Amerind; 1 Chinese.
† Amerind.

deaths in the Negroes, while tuberculous deaths were the more numerous in the Caucasians and the Mexicans.

Comment

Under the leadership of Drs. Claude Babcock, Bert Cotton, Ralph Cunningham, George Paulsen, and others, this community has kept pace with

modern methods for detection and medical and surgical treatment of tuberculosis. The county is rightly considered a hyperendemic area for coccidioidomycosis. It is of some interest, therefore, that in this autopsy series the fatalities due to tuberculosis exceeded those due to coccidioidomycosis. There was definitely less enthusiasm in requesting consent for autopsy in cases of known tuberculosis than in those of known coccidioidomycosis. Probably, therefore, the actual difference in fatality between the two diseases is even greater than these figures indicate.

The apparent vulnerability of the small Filipino group to both diseases may perhaps be attributed in part to their exceedingly unfavorable environment. However, it is doubtful whether the Caucasian, Mexican, and Negro populations represented in this autopsy series differ markedly in nutrition, domestic crowding, and exposure to agricultural dust. The differences in incidence of fatal coccidioidomycosis and fatal tuberculosis, and in the ratio between the two, among these three groups are, therefore, of considerable interest.

It will be noted that the incidence of fatal tuberculosis among the Negro females was of the same order as that among Caucasian males and females, while the incidence among Negro males was a little higher. The difference in incidence between Negro males and Caucasian males is slightly less than twice its standard deviation and, hence, probably not significant. The difference between the total Caucasian and Negro fatal tuberculosis rate is likewise between 1 and 2σ. Since larger statistical surveys [4] from other areas have established a significantly higher tuberculosis death rate in Negroes than in Caucasians, these figures may reflect merely the smallness of the samples and the decidedly underprivileged status of the Caucasian group. However, the incidence of fatal coccidioidomycosis in Negroes in this series appears about 10 times that of Caucasians; these differences are outstandingly significant. Conversely, the difference in incidence of fatal coccidioidomycosis between Caucasian and Mexican males is probably not significant, while the difference between all Caucasians and all Mexicans in this respect is less than 1σ. Yet, there is four times as much fatal tuberculosis in Mexican as in Caucasian males and eight times as much in Mexican as in Caucasian females, and, here again, the differences are statistically significant. Current figures on admissions to the county tuberculosis sanitarium corroborate the belief that in this area tuberculosis is conspicuously a Mexican disease. Finally, direct comparison between the Negro and Mexican groups, small though the numbers are, shows fatal tuberculosis to be significantly more common in the Mexicans and fatal coccidioidomycosis significantly more common in the Negroes.

With regard to the types of fatal coccidioidal disease seen in Caucasians, Mexicans, and Negroes, it will be noted (table 1) that, while massive suppuration, as represented by psoas abscess, and overwhelming dissemination ending fatally before meningitis can develop both occur in all three races, they are more common in the Negro than in the Caucasian or Mexican. Conversely, subacute or chronic meningitis without obvious visceral dissemination was noted twice in Negroes, twice in Mexicans, and four times in Caucasians.

It is suggested, therefore, that generalizations such as "the dark-skinned races are particularly susceptible to infectious granulomas" may be of very limited usefulness. At least in speaking of Mexicans and Negroes, in regard to coccidioidomycosis and tuberculosis, it seems important to specify which race and which infectious granuloma.

Summary

In a study of a 10-year autopsy series, comprising 4,989 autopsies, in a hyperendemic area of coccidioidomycosis, there were 99 fatalities attributable to tuberculosis as compared with 63 to coccidioidomycosis. The incidence of fatal tuberculosis was only slightly higher in Negro subjects than in Caucasian, but the incidence of fatal coccidioidomycosis in the Negroes was about 10 times that in Caucasians. Conversely, the incidence for Mexicans of fatal coccidioidomycosis was only slightly higher than that of the Caucasians, while that of fatal tuberculosis was very much higher. Filipinos appeared particularly vulnerable to both diseases. Fulminating dissemination of coccidioidomycosis and massive suppuration, although it occurred in Caucasians and Mexicans, was much commoner among Negroes.

1830 Flower St.

References

1. Forbus, W. D., and Bestebreurtje, A. M.: Coccidioidomycosis: Study of 95 Cases of Disseminated Type with Special Reference to Pathogenesis of Disease, Mil. Surgeon **99**:653-719 (Nov.) 1946.

2. Fiese, M. J.: Coccidioidomycosis, Springfield, Ill., Charles C Thomas, Publisher, 1958.

3. Huntington, R. W.: Diagnostic and Biologic Implications of Histopathology of Coccidioidomycosis, in Proceedings of Symposium on Coccidioidomycosis, Publication 575, United States Department of Health, Education, and Welfare, Public Health Service, Communicable Disease Center, Atlanta, Ga., Dec., 1957.

4. Rich, A. R.: Pathogenesis of Tuberculosis, Springfield, Ill., Charles C Thomas, Publisher, 1946.

SYMPTOMATIC HIATUS HERNIA

Richard F. Hoffman, M.D., Santa Monica, Calif., Kenneth Cruze, M.D., Los Angeles
and
Francis X. Byron, M.D., Beverly Hills, Calif.

Herniations through the esophageal hiatus of the diaphragm often give rise to elusive symptoms that are common to many other abdominal disorders; they sometimes also lead to peptic esophagitis, severe hemorrhages, and strictures. The authors recommend that medical management be tried first but that operation be performed if such management fails to relieve symptoms. Of 65 patients who underwent surgery for symptomatic hiatus hernia, 45 had complained of pain that was poorly localized but commonly described as a sensation of fulness, bloating, or pressure. Esophagoscopy was carried out in 48 patients, and the findings were reported normal in 22. Surgical repair can be done by either the thoracic or the abdominal route. The essential aim is to bring the gastroesophageal junction back into position below the diaphragm and to keep it there. The hernial sac must be destroyed without injury to the sphincteral mechanism about the cardia. This depends upon a thorough understanding of the functions of the crura of the diaphragm, the muscularis mucosae and muscularis externa of the stomach, various parts of the endoabdominal fascia, and the left gastric artery in maintaining the usual position of the cardia. Close attention to detail is mandatory. The patients of this series were followed for periods of time from six months to seven years, and 59 of the 65 became and remained free from symptoms after operation.

Most patients with symptomatic hiatus hernia can exist indefinitely on a medical regimen if the physician and patient are satisfied with a chronic state of semi-invalidism.[1] After moderate symptoms have become established, it is rare that cure will result without surgical treatment. Herniation of the cardia through the hiatus causes loss of integrity of the cardioesophageal valve, allowing reflux of gastric juice into the lower part of the esophagus. The repeated insults of the acid-pepsin with resultant escharotic action cause permanent damage and eventual destruction of the enigmatic one-way valve. Medical treatment may suppress the symptoms by neutralizing gastric acid; however, the treatment schedule must be rigidly followed. Many patients will not adhere to a strict program, and the peptic esophagitis progresses. The vulnerable mucous membrane and muscularis mucosae of the lower part of the esophagus are eventually destroyed, resulting in stricture with chronic dysphagia, pyrosis, and malnutrition.

The increasing awareness of hiatus hernia as a cause for bizarre and elusive symptoms is interesting, with the number of operations performed for this disease increasing markedly in recent years. Analysis by year for this hospital reveals 9 operations in 1950, 3 in 1951, 2 in 1952, 5 in 1953, 5 in 1954, 17 in 1955, 11 in 1956, and 13 in 1957 (total, 65). It is still curious, however, to note how many doctors refuse to accept hiatus hernia as a cause for symptoms. The skeptics would soon revise their opinions if they had under their care miserable patients with esophageal strictures secondary to the peptic esophagitis of hiatus hernia.

Materials

This is a report of 71 patients who received surgical treatment for symptomatic diaphragmatic hernia at the Wadsworth General Hospital between 1950 and 1957. Types of hernia included sliding (61), paraesophageal (4), traumatic (4), pleuroperitoneal (1), and congenital short esophagus (1). The youngest patient was 23 years old and the oldest 72 years, with a mean of 55.6 years. Of the 65 patients with symptomatic hiatus hernia, 22 were in the 50-to-59 age group, 25 in the 60-to-69 group, and 4 over 70 years of age. Fourteen patients were below 50 years of age, with 2 in the 20-to-29 group, 3 in the 30-to-39 group, and 9 in the 40-to-49 group.

From the Thoracic Surgery Division, Wadsworth General Hospital, Veterans Administration Center, Los Angeles.

Diagnosis

The symptoms are not specific and are common to many disorders of the upper part of the abdomen and angina pectoris. Pain was the most constant symptom, occurring in 45 (68.2%) cases, and consisted of a sensation of fulness, bloating, pain radiating to back, postprandial recumbency pain usually in the epigastrium, and pressure symptoms. Pyrosis and vomiting each occurred 25 (37.9%) times, and dysphagia occurred in 22 (33.3%) cases. Bleeding occurred in 21 (32.3%); in nine patients the bleeding was severe, and one required four transfusions in another hospital. It would have been

our practice to repair this hernia as soon as the patient had had adequate blood replacement. This patient eventually required an operation.

In 51 patients the duration of symptoms was less than six years, and in 28 of these it was less than two years. The remaining 15 had symptoms ranging up to 32 years' duration.

In all but one patient the diagnosis was established preoperatively by roentgenograms. In this one patient the hernia was discovered incidentally during a gastrectomy for ulcer disease and was repaired concomitantly.

Esophagoscopy was performed in only 48 cases, but it is now our firm belief that all patients with symptomatic hiatus hernia should have esophagoscopy performed prior to surgery. Esophagoscopic examination will enable the surgeon to accurately evaluate the lower part of the esophagus for evidence of esophagitis, ulceration, and stricture. Severe inflammatory changes may persist for prolonged periods after surgery, and in some cases the patient will have delayed too long in seeking aid and irreversible changes will have taken place.

Findings in 48 patients (72.7% of the total group) who had esophagoscopy were as follows: In 22 (45.8%) results were reported as normal. Twenty-one (43.8%) had esophagitis, three (14.3%) with ulceration, two (9.5%) with stricture, and one (4.8%) with associated ulceration and stricture. Esophageal stricture with normal mucosa above it was present in three patients (6.3%). The latter represents nature's attempt to protect the mucosa above the level of the stenosis from the corrosive action of gastric juices, but it does not improve the comfort and nutrition of the patient. Congenital short esophagus was reported on two occasions (4.2%); however, at surgery only one of these proved to be a true congenital lesion, the other representing a high cardioesophageal junction from recoil elastic shortening of the esophagus.

In addition to evaluating esophagitis, esophagoscopy is of value in eliminating the presence of a neoplasm in the hernia not diagnosed by the x-ray studies. We have not seen malignant tumors associated with hiatus hernias; however, Robb [2] reported three cases, and Grimes and Stephens [3] two. The combination of hiatus hernia and malignant tumor is admittedly rare, but knowledge of its existence prior to surgery would minimize the importance of the hernia in favor of the neoplasm and thus change the operation performed.

Associated diseases in the upper part of the abdomen and angina may be misleading, and in many patients errors in diagnosis have been made prior to discovery of the true cause of symptoms. Harrington [4] states that an average of three erroneous diagnoses were made in each of his cases; he lists them as cholecystitis, peptic ulcer, hyperacidity, secondary anemia, heart disease, carcinoma of the cardia, stricture, intestinal obstruction, appendicitis, and thoracic tumor. We have encountered similar situations, and where two diseases occur simultaneously the problem of distinguishing which disease is causing the symptoms sometimes presents a problem. We have used diagnostic pneumoperitoneum [5] a few times to help identify the symptomatic process and are encouraged by its results in difficult diagnostic problems. Induction of pneumoperitoneum apparently causes reduction of the hernia when the patient is in the upright position, and if symptoms are due to the hernia they will be relieved. When the patient is in the supine position, herniation again occurs and symptoms reappear.

Of the 65 patients 21 (32.3%) had peptic ulcers, and we feel there is a strong association between these two conditions, with the common denominator being gastric hyperacidity. Of the 21 patients who had esophagitis, 12 also had gastric or duodenal ulcer. It is now our custom to obtain studies for gastric acidity, and in many this level is high.

Burford and Lischer [6] advised use of Finney pyloroplasty alone in treatment of hiatus hernia with simple esophagitis, the concept being that pyloroplasty assures downward outflow of gastric acid pepsin, thus preventing reflux by decreasing resistance at the pylorus. With high gastric acidity or with peptic ulcer, associated with hiatus hernia, a more satisfactory procedure would be repair of the hernia and performance of vagotomy and pyloroplasty.

Esophageal acid reflux studies and Bernstein's test [7] are helpful in difficult problems. In the latter test, a small plastic tube is passed into the distal part of the esophagus and either dilute hydrochloric acid or saline solution is dripped through the tube. When esophagitis is present, the dilute acid will cause reduplication of the symptoms as it reaches the distal part of the esophagus but the saline solution will not. This test is more accurate in assessing mild degrees of esophagitis than is esophagoscopy, since the earliest changes are submucosal and not mucosal and, therefore, not visible to the naked eye.

Previous Treatment

Forty-three patients had received nonsurgical treatment, and 24 (48%) had been under apparently adequate medical management for a period ranging from several months to 11 years. The evaluation of prior medical treatment from the patient's history is sometimes difficult, but under adequate treatment we included those who stated they had been under prolonged care directed by a physician, clinic, or hospital. It should again be emphasized that many persons will not follow the ideal treatment program so necessary to control the regurgitant esophagitis. Seven patients (14%) had had one or more previous operations directed at repair of the hernia; they represented a special challenge,

since such hernias have a higher recurrence rate than those in patients not previously operated on. Sixteen (24.2%) had received no prior treatment.

Operation

Most of the operations were performed by residents in general and thoracic surgery, with variations in technique being utilized. The basic principles of repair can be accomplished through either abdomen or chest, and these principles should not be compromised, whichever route is used. When associated abdominal disease is present the abdominal approach may be preferable, in that treatment of both lesions can be done simultaneously. In some patients exposure through the abdomen is so difficult that it becomes a tedious and almost impossible operation. The transthoracic approach, in our hands, has been more satisfactory, and even the cases which would appear most trying are reduced to technically easy operations. The periesophageal inflammatory adhesions and fibrosis can be properly managed under direct view through the chest approach.

The most important factor in repair of hiatus hernia is to reduce the gastroesophageal junction below the diaphragm and maintain it there. If the phrenoesophageal ligament is of sufficient strength, it should be sutured to the abdominal surface of the diaphragm; however, frequently this ligament is a tenuous, almost ethereal membrane of little value. The crura should be approximated posteriorly, since anterior approximation changes the normal relationships between the esophagus and the crus, with backward displacement from its normal position, and leaves open the weak, unprotected area posteriorly. The hernia sac must be destroyed and the pinchcock mechanism kept intact by avoidance of injury to the cardia, crura, and oblique angle of the esophageal entrance into the stomach.

Results

Of the 65 patients who were operated on, 59 (90.8%) have been asymptomatic over a follow-up period ranging from six months to seven years. This compares favorably with other reported series.[3] In five (7.7%) results are classified as failures because of persistent symptoms; however, three of these patients complain only of "gas." One has a recurrent stricture, and one had severe esophagitis when last seen.

One patient died on the fourth postoperative day of a massive pulmonary atelectasis, and autopsy revealed an unrecognized, clear-cell carcinoma of the kidney and cirrhosis of the liver. This one death represents a mortality of 1.5%.

There were five (7.7%) complications of surgery, one of which was a nosocomial staphylococcic pericarditis which has cleared on antibiotic treatment (10-month follow-up). One patient had postoperative partial gastric volvulus with pyloric obstruction and recovered after a subtotal gastrectomy was done. Two have chest wall pain which is severe and persistent, and one had persistent esophageal stenosis eventually treated by esophagogastrectomy. Of the patients with complications, none have, at the time of writing, hiatus hernia symptoms and in two the complications cleared with further treatment.

Forty-four (67.7%) of the 65 patients were studied postoperatively with x-rays, and 7 (10.8%) had a small recurrence of the hernia. All but one were asymptomatic, and in this one case symptoms were controlled by medical management.

Comment

The gullet traverses the posterior mediastinum from the hypopharynx to the abdomen and passes through the hiatus. Its normal elastic recoil action pulls it upward against the forces which tend to maintain the normal anatomic relationships. The right and left diaphragmatic crura arise from the bodies of the first three or four lumbar vertebrae. The left fans out onto the diaphragm and does not contribute to the hiatus. The hiatus (fig. 1A) is formed entirely from the right crus as a teardrop-shaped split in the muscle fibers.[8] The right crus originates on the vertebral bodies, arcs up anteriorly along the gentle curvature of the diaphragm, passes around the esophagus to the left, and passes downward posteriorly toward the right where it meets its ascending limb. In the posterior area behind the esophagogastric junction is a fat pad which is unsupported and unprotected. In the supradiaphragmatic region this represents the posterior mediastinum, and the herniated stomach passes in this direction and upward. Herniation of the bare area

Fig. 1.—*A*, hiatus shown from anterior aspect illustrating formation of hiatus by right crus of diaphragm. *B*, phrenoesophageal ligament shown from anterior aspect. Heavy black lines illustrate ligament as continuation of endoabdominal fascia up through hiatus and insertion onto esophagus.

of the stomach and esophagogastric junction is comparable to a sliding hernia of the sigmoid colon, and reduction at surgery is accomplished in the same manner.

The endoabdominal fascia is a continuum and, in different areas, bears different names. In the lower part of the abdomen it is called the transversalis fascia; however, at the diaphragmatic hiatus region it is called the diaphragmatoesophageal fascia or phrenoesophageal ligament.[9] It ascends through the hiatus and, 1 or 2 cm. above the esophagogastric junction, inserts onto the esophagus and helps maintain the normal relationship of the esophagogastric junction to the diaphragm (fig. 1*B*). The peritoneum is loose and is generally not considered to have any effect in this regard. The ligament is resilient and allows considerable play of the esophagus through the hiatus.

According to Barrett,[10] the left gastric artery plays the most important role in maintaining the usual position. It tethers the upper lesser curvature aspect of the stomach to the posterior abdominal wall and helps resist herniation; however, if stretched it will allow the cardia to slip into the mediastinum.

The intrinsic muscular sling of the stomach is a band of gastric muscularis which passes from the lesser curvature posteriorly around the esophagogastric junction to the anterior aspect of the stomach and assists the hiatal sling in maintaining the acute oblique angle of entrance of the esophagus into the right side of the stomach.[10] Loss of the acute angle, such as with depression of the fundus of the stomach by the tonic contraction of the diaphragm during vomiting, causes incompetence of the cardia.

The exact mechanism of action of the one-way valve is not known; however, the oblique angle of entrance of the esophagus into the stomach is felt to be very important. Increased intragastric pressure tends to assist the valve mechanism having normal relationships by closing the valve, but, with the esophagogastric junction in the mediastinum, reflux readily occurs. Barrett [10] feels that the integrity of the muscularis mucosae, which moves the mucous membrane, must be intact. The muscosae slides on the muscularis externae and forms a flap which covers the esophageal orifice and thus closes the valve. The earliest changes that occur in esophagitis are not visible in the distal esophageal mucosae to the endoscopist's eye but are quite evident to the pathologist in the region of the muscularis mucosae in a biopsy specimen. Inflammatory changes and fibrosis will destroy the mucosa flap valve mechanism by destroying the muscularis mucosae. How many

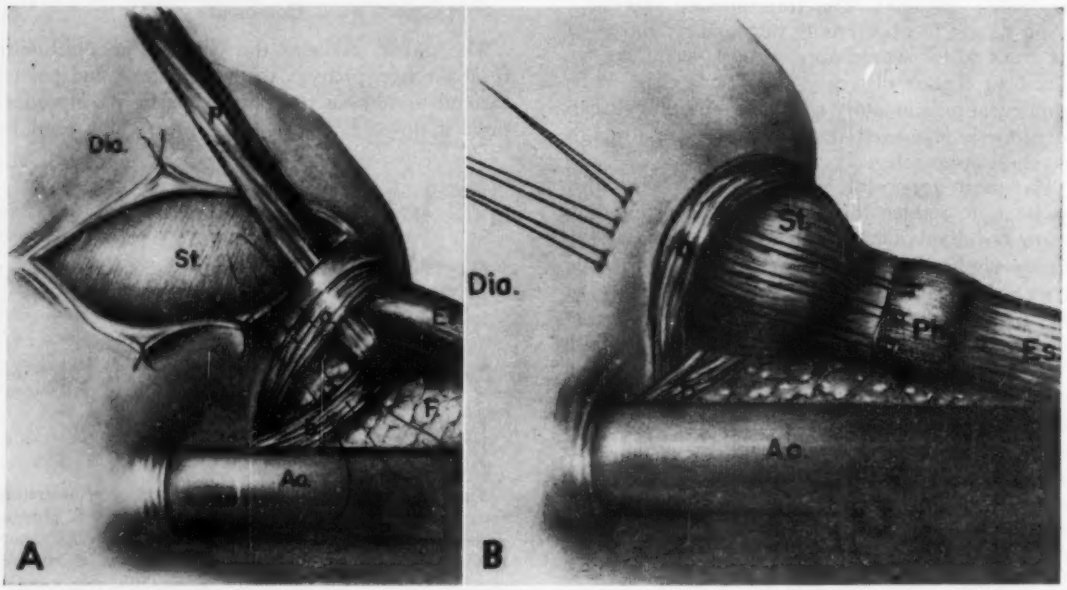


Fig. 2.—Illustration of operative area from left transthoracic approach. *A*, Penrose drain in place, with interrupted sutures placed posteriorly to approximate hiatal musculature and to narrow opening (*Ao*, aorta; *Dia*, diaphragm; *Es*, esophagus; *F*, mediastinal fat; *P*, Penrose drain, *St*, stomach; *b*, right crus of hiatus; *a*, left crus of hiatus). *B*, stomach herniated upward and phrenoesophageal ligament dissected free as membrane, with its insertion into esophagus preserved. Three sutures only (more are usually necessary) have been placed in ligament; both ends of each have been passed through hiatus and then through diaphragm from abdominal to thoracic side (*Ph*, phrenoesophageal ligament).

months or years are necessary to make these changes advance to a stage of irreversibility varies with the severity of the regurgitation and with the concentration of the irritating gastric juice.

Many "asymptomatic" persons have hiatus hernia demonstrated on barium x-ray examination with use of barium sulfate, but it is curious why they seek medical aid and have x-ray studies done. What initiates symptoms in persons with previously asymptomatic hiatus hernia is not known. We have noticed a strong correlation between the onset of symptoms with physical or emotional stress, prolonged hospitalization and recumbency, an operation not related to the stomach or esophagus, transient hyperacidity, repeated severe vomiting, and the prolonged use of an indwelling nasogastric tube.

Because of the terrifying consequences of an untreated and symptomatic hiatus hernia,[11] we strongly urge surgical repair before the irreversible changes in the submucosal layers occur. A period of adequate medical management should be tried first; however, unless the symptomatic trend is completely reversed and unless one is sure the patient will adhere to a strict medical program, surgery should be advised without procrastination.

In experienced hands either the abdominal or transthoracic approach can be used to accomplish an equally satisfactory operation. In many instances concomitant procedures can be done in the upper part of the abdomen, making this route preferable.[4] However, many surgeons today still fail to accept hiatus hernia as a cause of symptoms. During an abdominal operation a halfhearted attempt may be made at repairing the hernia, with strict attention to details not being followed, and the patient is not helped. This type of repair is mentioned only to be condemned and has nothing to offer other than antacids, bland diet, and antispasmodic drugs.

Our preference is for the transthoracic approach (fig. 2). The basic principles of an adequate repair should not be compromised; however, each surgeon has personal preferences in technical management, and these details should be varied according to necessity.

The basic principles are as follows: 1. The esophagogastric junction should be brought below the diaphragm and maintained there. 2. The peritoneal sac should be destroyed. 3. The phrenoesophageal ligament, if suitable, should be sutured to the abdominal surface of the diaphragm. 4. The fatty bare area posteriorly should be eliminated and the hiatus narrowed by approximation of the two muscular bundles of the right crus posteriorly. 5. The oblique angle of entrance of the esophagus into the stomach should be protected and maintained. If these principles are followed, the results, we feel, should be excellent.

Summary

The surgical treatment of hiatus hernia was evaluated in 65 patients. Medical management should be tried first, but, unless symptoms are relieved completely and the patient is willing to adhere strictly to a rigid medical management for many years, operation should be performed. Surgical repair resulted in 90.8% of the patients in this study becoming asymptomatic over a follow-up period of six months to seven years.

Close attention to details of the operation is mandatory for good results. The abdominal or thoracic approach can be used to accomplish the same technical results, but the basic principles should not be compromised. Our preference is for the transthoracic approach. The cardia must be reduced below the diaphragm. The hernia sac must be destroyed. The bare area posteriorly should be eliminated and the hiatus narrowed by approximation of the muscular bundles of the right crus posteriorly. The phrenoesophageal ligament should be sutured to the abdominal surface of the diaphragm, and the oblique angle of entrance of the esophagus into the stomach should be maintained.

628 24th St. (Dr. Hoffman).

References

1. Kleitsch, W. P.: Catastrophic Complications of Hiatus Hernia, A. M. A. Arch. Surg. **65**:665-672 (Nov.) 1952.

2. Robb, D.: Malignant Disease in Association with Hiatus Hernia and Thoracic Stomach, J. Thoracic Surg. **25**:493-494 (May) 1953.

3. Grimes, O. F., and Stephens, B. H.: Surgical Treatment of Esophageal Hiatus Hernia, Am. J. Surg. **92**:194-205 (Aug.) 1957.

4. Harrington, S. W.: Esophageal Hiatal Diaphragmatic Hernia, Surg. Gynec. & Obst. **100**:227-292 (March) 1955.

5. Berry, W. C.; Holbrook, J. P.; Langdon, E. A.; and Mathewson, C.: Study of Hiatus Herniae, Using Pneumoperitoneum: Preliminary Report, A. M. A. Arch. Surg. **72**:1014-1017 (June) 1956.

6. Burford, T. H., and Lischer, C. E.: Treatment of Short Esophageal Hernia with Esophagitis by Finney Pyloroplasty, Ann. Surg. **144**:647-652 (Oct.) 1956.

7. Bernstein, L. M., and Baker, Lyle A.: Clinical Test for Esophagitis, Gastroenterology **34**:760-781 (May) 1958.

8. Carey, J. M , and Hollinshead, W. H.: Anatomic Study of Esophageal Hiatus, Surg. Gynec. & Obst. **100**:196-200 (Feb.) 1955.

9. Allison, P. R.: Reflex Esophagitis, Sliding Hiatal Hernia, and Anatomy of Repair, Surg. Gynec. & Obst. **92**:419-431 (April) 1951. Reference 4.

10. Barrett, N. R.: Hiatus Hernia: Review of Some Controversial Points, Brit. J. Surg. **42**:231-243 (Nov.) 1954.

11. Blades, B., and Hall, E. R.: Consequences of Neglected Hiatal Hernias, Ann. Surg. **143**:822-830 (June) 1956.

PRURITUS ANI ET VULVAE

Earl D. Osborne, M.D.
and
Howard L. Stoll, M.D., Buffalo

Local primary irritation is by far the most frequent cause of pruritus ani et vulvae. Other causes are contact dermatitis, specific dermatological diseases, disease of the anal, rectal, and genitourinary tracts, disease of other organs, and psychogenic disturbances. Etiological diagnosis is often difficult because pruritus from any cause can exist for only a short time before visible secondary changes are induced by scratching and medication. Anal pruritus scarcely exists in geographical areas where bathing with water and no soap or toilet paper is the custom after defecation. When an organ system other than the anogenital apparatus is involved, all local sources of irritation should be removed and conservative treatment applied until the true source of the itching sensation becomes apparent. Presumed psychogenic disturbances are made worse by treatment if the diagnosis happens to be incorrect, and the supposed emotional exhaustion rapidly disappears when the real etiology is discovered and eliminated. More time should be spent on searching out the underlying cause of anogenital pruritus. Specific sensitization to condiments should not be overlooked in unsolved cases.

For purposes of this round table discussion on anogenital pruritus, we have reviewed our last 500 cases and the voluminous literature on the subject for the past 25 years. Concepts of this symptom complex have been constantly changing. The literature is replete with articles approaching the subject from the standpoint of the surgeon,[1] the gynecologist,[2] the dermatologist,[3] the allergist,[4] and the psychiatrist.[5] It is obvious that for the proper treatment a diagnosis must be made based on etiology. Local treatment, based on the symptom of itching, may be temporarily successful, but in the long run may lead to serious disappointments and complications.

Pruritus ani et vulvae is a symptom complex of great variation. Pruritus without any visible pathology exists only for a short period of time. Very soon, changes appear in the skin and the adjacent mucous membranes. The examiner must be able to recognize the basic inflammatory process in order to make an etiological diagnosis. He must be able to distinguish between a dermatitis due solely to scratch and a dermatitis due to primary chemical irritation and a dermatitis of allergic origin. He must also be able to recognize the earliest signs of atrophy, hypertrophy, and specific inflammatory processes such as occur in lichen planus, lupus erythematosus, and parasitic infestations.

Each specialist tends to overemphasize disturbances or diseases with which he is familiar as the cause of pruritus of the anogenital region. Vulvectomies for lichen planus and perianal injections of alcohol or tattooing for perianal psoriasis have been done after inadequate examination. Likewise, prolonged dermatological therapy for anogenital pruritus without benefit is carried out when the dermatologist fails to have adequate gynecologic and proctological examination for such things as cryptitis, proctitis, and cervicitis. In our experience, some of the worst treatment failures have occurred after months of therapy by a stubborn specialist who would not recognize the importance of other fields. We refer particularly to cases of pruritus vulvae due to an almost insignificant discharge from a focus of infection in the genital tract requiring the attention of a gynecologist and intractable pruritus ani treated for months by a dermatologist and found by the proctologist to be due to cryptitis in hidden pockets of infection. The following list is our classification of pruritus ani et vulvae based on etiology: (1) local primary irritation, (2) contact dermatitis (dermatitis venenata), (3) specific dermatological diseases, (4) anal, rectal, and genitourinary tract disease, (5) disease of other organs, and (6) psychogenic disturbances.

Chief, Department of Dermatology and Syphilology, University of Buffalo, School of Medicine (Dr. Osborne), and Senior Resident in Dermatology and Syphilology, E. J. Meyer Memorial Hospital (Dr. Stoll).

Chairman's address, read before the Section on Dermatology at the 107th Annual Meeting of the American Medical Association, San Francisco, June 24, 1958.

Local Irritation

The various sources of local irritation comprise by far the largest group. At first there is itching of various degrees followed by the development of a scratch dermatitis, with erythema, scaling, thickening, fissuring, hyperpigmentation, and, as a final stage, leukoplakia and possibly malignancy. The three commonest sources of irritation are (1) leukorrhea, even though minimal; (2) the daily use of toilet soap; and (3) the retention of fecal remnants in folds of the anal canal. A fractional drop of leukorrheal discharge from any cause, such as trichomonas vaginalis infection, can set up an intolerable itching which may be protracted over months and even years. In uncleanly people, who bathe infrequently, the retention of sweat and sebaceous material protects the skin and mucous

membranes from the irritating effects of this discharge. Protective ointments and pastes have proved effective in relieving the pruritus because of their protective effect.

It is an ironic and extremely important fact that anal pruritus scarcely exists in geographical areas where bathing with water and no soap or toilet tissue is the custom after defecation. Marchionini,[6] in 1952, stated that, because of the religious precepts of Islam, after defecation only plain water was used for cleanliness and all mechanical irritation of the skin and mucous membranes was avoided, thus eliminating a medium favorable to the growth of microbes. Fecal remnants were removed and, although hemorrhoids were common, irritation did not develop. In his own practice now, in Munich, he uses dilute potassium permanganate solution for cleansing purposes after defecation. This is a practice which we have used for more than 30 years for the entire anogenital area with gratifying results.

Highly alkaline soap precipitates retained in folds and crypts produce a chemical irritation which may last for one to two weeks and, because of daily repetition, may become progressively worse. Often retention of a combination of minute fecal material and soap precipitates the pruritus. It is our firm belief that primary irritation from the above-mentioned sources of irritation is the basis of at least 75% of all anogenital pruritus, although there may be secondary factors of great importance such as emotional stress.

Contact Dermatitis (Dermatitis Venenata)

Next to primary irritation, contact dermatitis is the most common cause of itching of the anogenital region. A large list of substances has been incriminated. The principal allergenic substances include local medications, toilet paper, suppositories, enema and douche nozzles, resin finishes on fabrics, drugs taken by mouth, nail lacquer, deodorants, plant oleoresins, contraceptives, and some foods. There are numerous reports in the literature of anogenital pruritus due to specific sensitization to common foods such as milk, wheat, eggs, chocolate, alcohol, fish, coffee, cocoa, beef, figs, tomatoes, asparagus, dewberries, beans, avocados, pork, prunes, peas, beets, yeast, chicken, rice, oranges, and peanuts. Some of these were confirmed with patch tests, some with intradermal tests, and others by the use of elimination diets. It has been our experience over many years that a positive patch or intradermal test is only another finding and that in all cases this must be proved clinically by withdrawal of the suspected food followed by a recrudescence after the food has been again ingested.

There is a vast difference between urticarial reaction to the protein fraction of foods and the development of a contact dermatitis due to specific epidermal hypersensitivity to an oleoresin. Urticaria due to the protein fraction of foods can always be elicited over other parts of the cutaneous surface and is never limited solely to the anogenital region. We believe that contact dermatitis due to oleoresins in certain foods and particularly condiments offers a fertile field for further investigation. We have yet to prove a localized anogenital pruritus due to specific sensitization to the oleoresins of common foods. However, we would at this time like to report a series of 11 cases of anogenital pruritus due to specific hypersensitivity to the oleoresins of condiments. Although spices have been mentioned as possible causes of pruritus ani et vulvae,[7] there are no published reports of confirmatory patch tests to any of the condiments. Mustard, pepper, cloves, cinnamon, anise, and nutmeg have been shown to be the cause of dermatitis of areas other than the anogenital region and, in some of these instances,[8] positive patch tests have been secured. In our series, in each case a battery of standardized patch tests was performed. This list included mustard, pepper, cloves, cinnamon, nutmeg, vanilla, and allspice. In each instance, where a positive patch test was secured, a flare-up of anogenital pruritus was produced on further ingestion of the suspected condiment.

The main clinical features of an anogenital pruritus due to specific sensitization to oleoresins are easily recognized. The itching begins perianally and shortly thereafter itching of the vulva and surrounding parts develops. There is a spreading contact type of dermatitis which first involves the intergluteal and perianal areas. Depending on the severity of the dermatitis, the entire area becomes confluent and the dermatitis may spread out to involve the thighs and the crural folds. In some cases, there is fluctuation in the severity, depending on the frequency of ingestion of the offending condiment. In our one black pepper case, the dermatitis was severe and continuous. In one of our cinnamon cases, the itching was pronounced for three or four days the first part of the week and subsided by the end of the week or until cinnamon was again ingested at Sunday morning's breakfast. There was wide variation in fluctuations in our mustard cases. Some were continuous, others with periods of freedom depending on the frequency of ingestion. It is well to remember that mustard is present in most salad dressings as well as meat sauces, ketchup, and chili sauce.

Contact dermatitis of the vulva without involvement of the anal area is not common. Substances commonly incriminated include local medications, suppositories, contraceptives, sanitary pads, tampons, douche nozzles, pessaries, nail lacquer, plant oleoresins, and certain medicaments excreted through the urine. All of these possibilities must be investigated when there is a dermatitis present. A unilateral contact dermatitis is sometimes due to specific hypersensitivity to nail lacquer and usually is on the left side due to contact with the fingernails of the right hand. A unilateral itching may be due to neurogenic causes, although careful investigation of all sources of irritation, including masturbation,

must be made. There may be a patchy dermatitis of the eyelids, cheeks, or neck, which are the common sites of nail lacquer dermatitis.

Other Dermatological Diseases

Space does not permit a full discussion of dermatological disorders which may involve the anogenital region and which require special dermatological training for diagnosis. These diseases include dermatitis medicamentosa (especially phenolphthalein), psoriasis, seborrheic dermatitis, neurodermatitis, mycotic infection, intertrigo (bacterial), miliaria, lichen sclerosis et atrophicus, kraurosis vulvae, parasitic infestation, lupus erythematosus, lichen planus, and leukemia cutis. It is obvious that the symptoms of anogenital itching requires a thorough dermatological examination and in many cases a biopsy and complete laboratory tests.

Anorectal Diseases

Anal itching has been attributed to many anorectal disorders. In our experience, the following signs are the most common causes of this symptom: cryptitis, hemorrhoiditis, fissures, sinuses, fistulas, proctitis, neoplasm, and polyps. If uncomplicated by injudicious treatment, the itching usually remains localized to the perianal area, but occasionally itching of the genital and scrotal areas develops. A scratch dermatitis appears which with the passage of time becomes a chronic dermatitis with thickening, fissuring, and hyperpigmentation. In addition to a careful proctological examination, one must never forget that primary irritation from retained fecal material and soap in many folds and crypts may be the sole cause of inflammation of the anal ring.

Disease of Organs Other Than the Anogenital Region

Many general diseases have been incriminated as the cause of itching of the anogenital area. The commonest one in our experience is urticaria. In some patients who have occasional bouts of urticaria, their skins are in a constant subthreshold stage of urticaria. These patients develop itching of the anogenital area with extreme ease, and careful examination will elicit the basic nature of the condition with evidences elsewhere of urticaria. Endocrine diseases, including thyroid, pituitary, ovarian, and pancreatic (diabetes) have been incriminated. Neurological disturbances such as autonomic imbalance and epilepsy have been accompanied by anogenital pruritus. Other diseases mentioned in the literature include hepatic disease, renal disease, prostatitis, cystitis, appendicitis, intestinal parasites, bladder stone, vesiculitis, disease of the uterus and adnexa, lymphoma, and allergic rhinitis. We believe that in all cases where an organ system other than the anogenital apparatus is involved all local sources of irritation should be removed and conservative treatment applied until the true source of the itching sensation becomes apparent.

Psychogenic Disturbances

Three American textbooks of dermatology [9] attribute the majority of cases of pruritus ani et vulvae to some psychogenic disturbance. Their terminology varies. Many highly qualified dermatologists stress the importance of emotional factors in anogenital itching. We agree that emotional factors sometimes play major roles in anogenital itching. We believe that all emotional stress accentuates, prolongs, and magnifies the symptom of itching. However, we are firmly convinced that a careful history and thorough examination will show that psychogenic factors are secondary in the vast majority of cases. What would be a mild, insignificant pruritus ani or pruritus vulvae in an emotionally stable individual could be magnified to a major disaster in another individual under intense emotional stress. Not enough attention has been paid to the primary trigger mechanism. More careful attention to the primary cause of the itching will eliminate a large percentage of the so-called psychogenic anogenital pruritus cases. The theory that pruritus ani et vulvae is a type of hysteria in which the gratification of pruritus is analogous to gratification of libido and the pain of scratching is related to self-punishment and guilt [10] does not succeed in curing a middle-aged woman of pruritus of the anogenital region when the cause of her pruritus is a low-grade leukorrhea and washing of the parts three or four times daily with soap.

Another popular approach regards pruritus ani as a hypochondriacal syndrome based on the failure to successfully repress infantile fantasies concerning procreation and anal birth.[5] This has the appearance of picking a needle out of a haystack. In one of our pepper cases, that of the wife of a physician, and in one of the mustard cases, that of a middle-aged spinster, as well as in many of the routine cases due to leukorrhea and irritation from soap, the patients had already had a diagnosis of psychogenic or emotional basis for the cause of their itching. It has been our observation that many of these patients subjected to long, drawn out treatment for presumed psychogenic disturbances are made infinitely worse. It is startling how rapidly the emotional exhaustion disappears when the real etiology is discovered and eliminated. We would urge that much more time be spent on searching out the underlying cause of anogenital pruritus and its elimination.

Summary

The treatment of anogenital pruritus depends on the determination of the cause of the pruritus. More attention must be given to a search for primary irritants, such as the use of soap, leukorrhea, retained fecal matter, and local medications. Contact dermatitis due to specific hypersensitivity is a distinctive entity and its cause must be determined. Oleoresins in condiments should not be overlooked. Specific dermatological diseases of the anogenital area must be correctly diagnosed and treatment

based thereon. The gynecologist and proctologist need consultation with the dermatologist and certainly the reverse holds true. Anogenital pruritus in some cases may be but a symptom of an internal medical condition. Psychogenic disturbances and emotional stress are always a factor in anogenital pruritus, but they should never be assigned the primary etiological role without complete examination and consideration of all other possible causes.

71 North St. (2) (Dr. Osborne).

References

1. Tucker, C. C.: Cause and Treatment of Pruritus Ani, A. M. A. Arch. Surg. **62**:428-436 (March) 1951.

2. Karnaky, K. J.: Pruritus Vulvae; Twenty-Year Study, Am. J. Surg. **87**:188-194 (Feb.) 1954.

3. Lynch, F. W.: Pruritus Vulvae as Seen in Dermatological Practice: Chairman's Address, J. A. M. A. **150**:14-18 (Sept. 6) 1952. Fromer, J. L.: Dermatologic Concepts and Management of Pruritus Ani, Am. J. Surg. **90**:805-815 (Nov.) 1955. Hailey, H.: Pruritus Ani et Vulvae: Report of 520 Consecutive Patients with Eczema of Anal and Vulva Regions, J. A. M. A. **139**:837-840 (March 26) 1949.

4. Waldbott, G. L.: Allergic Aspect of Pruritus Ani et Vulvae, G. P. **14**:98-100 (Oct.) 1956.

5. MacAlpine, I.: Pruritus Ani—Psychiatric Study, Psychosom. Med. **15**:499-508 (Sept.-Oct.) 1953.

6. Marchionini, A.: Die Seltenheit des Analekzems und Analpruritus bei Mohammedanern, Hautarzt **4**:455-457 (Oct.) 1953.

7. Jaffe, N. B.: Pruritus Ani, Am. J. Digest. Dis. **14**:202-205 (June) 1947. Reference 4.

8. Schwartz, L.; Tulipan, L.; and Birmingham, D. J.: Occupational Diseases of Skin, ed. 3, Philadelphia, Lea & Febiger, 1957. Howell, J. B.: Contact Dermatitis: Analysis or Tabulation of All Cases Proved in Single Year, Arch. Dermat. & Syph. **53**:265-277 (March) 1946.

9. Ormsby, O. S., and Montgomery, H.: Diseases of Skin, ed. 8. Philadelphia, Lea & Febiger, 1954. Pillsbury, D. M.; Shelley, W. B.; and Kligman, A. M.: Dermatology, Philadelphia, W. B. Saunders Company, 1956. Becker, S. W., and Obermayer, M. E.: Modern Dermatology and Syphilology, Philadelphia, J. B. Lippincott Company, 1940.

10. Stokes, J. H.: Effect on Skin of Emotional and Nervous States: Masochism and Other Sex Complexes in Background of Neurogenous Dermatitis, Arch. Dermat. & Syph. **22**:803-810 (Nov.) 1930.

ADVERSE REACTIONS TO SULFAMETHOXYPYRIDAZINE (KYNEX)

ITS USE IN THE TREATMENT OF DERMATITIS HERPETIFORMIS

Harold O. Perry, M.D.
and
Richard K. Winkelmann, M.D., Rochester, Minn.

In most cases the control of dermatitis herpetiformis may be readily achieved with sulfamethoxypyridazine. It is impossible to predict the level of maintenance dose necessary to suppress the clinical reaction, and it is similarly impossible to predict the blood levels achieved with any single unit dosage. Adverse reactions deter from the over-all usefulness of the drug. The adverse reactions observed concerned principally the skin and hematopoietic system. In addition, the gastrointestinal and central nervous system showed evidence of toxicity. The dermatological manifestations followed almost all known previously reported reactions to sulfonamide drugs. The administration of this drug requires routine assay of the blood for sulfamethoxypyridazine levels. It is the duty of the clinician to balance the benefits to be derived from any drug against the risks of its administration.

The administration of any drug to a patient is fraught with the possibility that undesirable and adverse reactions may ensue. The clinical usefulness of any drug, once the therapeutic indication has been determined, depends to a very considerable extent on whether it is likely to produce more than a minimal number of reactions when a large number of patients take the drug. If a drug fulfills a sufficiently critical therapeutic role it may continue to be prescribed despite a rather large number of undesirable reactions. It is the duty of the clinician to balance the benefit to be derived from the drug against the risks of its administration.

The administration of sulfamethoxypyridazine (Kynex) to a group of patients with dermatitis herpetiformis whose disease was otherwise incompletely controlled by other modalities of treatment resulted in a gratifying response in a sufficiently large proportion of the patients treated to suggest its further use in this disease. The advantages of

From the Section of Dermatology, Mayo Clinic and Mayo Foundation. The Mayo Foundation is a part of the Graduate School of the University of Minnesota.

Read before the Section on Dermatology at the 107th Annual Meeting of the American Medical Association, San Francisco, June 26, 1958.

sulfamethoxypyridazine administration were the beneficial results achieved in a majority of the patients treated and the simplification of the therapeutic program, inasmuch as treatment for the most part was given only once a day.

Data

The treatment of 20 patients with dermatitis herpetiformis represents a part of our experience with sulfamethoxypyridazine. The only criterion used in the selection of patients for inclusion in this group was that they presented the clinical morphologic picture of dermatitis herpetiformis. In some instances this clinical impression was fortified by results of skin biopsy that were compatible with the diagnosis of dermatitis herpetiformis, by patch-test reactions to anion members of Hofmeister's series, and by eosinophilia of the peripheral blood. The data on these 20 patients are summarized in table 1.

TABLE 1.—*Summary of Data on Twenty Patients with Dermatitis Herpetiformis Treated with Sulfamethoxypyridazine*

Case, No.	Sex	Age, Yr.	Duration of Disease, Yr.	Control	
				Results	Dosage, Gm.
1	M	65	15	Incomplete	...
2	F	57	6	Incomplete	...
3	M	62	1½	Good	2.5/day
4	F	66	20	Good	0.5/day
5	M	46	14	Incomplete	
6	F	37	6	Good	1/day
7	F	63	25	Good	0.125/day
8	M	44	5	Good	1/day
9	M	19	1¾	Good	Adverse reaction
10	F	60	2	Incomplete	...
11	F	37	1	Good	0.5 in a. m.; 0.25 in p. m.
12	M	60	8	Trial unsatisfactory	...
13	M	25	8	Good	0.25 twice a day
14	M	44	1½	Good	Adverse reaction; died
15	M	45	20	Good	0.5/day
16	M	28	9	Good	0.5 every 2 or 3 days
17	M	56	¼	Good	1 every other day; 0.5 on alternate days
18	M	47	9	Good	Adverse reaction
19	F	3	7/12	Failure	...
20	M	59	3	Good	Adverse reaction

Thirteen of the 20 patients were males, the majority being in the fifth, sixth, and seventh decades of life; the ages ranged from 3 to 66 years. Only two patients had dermatitis herpetiformis for less than a year, with 13 of the 20 patients having had their disease for three years or longer. Thus, most of the patients had been subjected to a variety of treatments prior to the initiation of therapy with sulfamethoxypyridazine. The periods of follow-up varied from 2 to 11 months.

Early in the course of the study, because of a lack of appreciation of the fact that the drug would accumulate in the blood, therapy was administered in a manner similar to that employed with other sulfonamide drugs. Later it was our practice to administer 1 Gm. of sulfamethoxypyridazine during the first 24 hours of treatment, followed thereafter by 0.5 Gm. per day. Adjustment in the dosage schedule was made subsequently in accordance with the patient's clinical response.

Blood levels of sulfamethoxypyridazine were determined consistently on the patients seen during the latter part of the study, as it was recognized by tests on individual patients seen earlier that variable blood levels occurred with standard dosage schedules. For illustration, the patient in case 3 was dismissed from our care with his dermatitis herpetiformis controlled; he was instructed to continue taking 1 Gm. of sulfamethoxypyridazine a day. He subsequently recognized that this afforded an inadequate suppressive effect and on his own initiative increased his daily intake to 1.5 Gm. Still later, he took 2 Gm. routinely and, occasionally, even 2.5 Gm. per day for the desired relief. After approximately three months on this increased dosage, the concentration of sulfamethoxypyridazine was 8.7 mg. per 100 cc. of blood. On the other hand, in the patient in case 8, who took 1 Gm. of sulfamethoxypyridazine per day for three months, a concentration of 11.4 mg. per 100 cc. of blood developed.

The results of treatment of these 20 patients might be summarized as follows: good continued response, 10 patients; good response but subsequent reaction, 4; incomplete control, 4; failure, 1; and unsatisfactory trial, 1.

Control of the symptoms of pruritus and burning and eradication of the cutaneous eruption occurred in 10 of the 20 patients. By "incomplete" control we would indicate that sulfamethoxypyridazine alone was inadequate to control the eruption but when it was combined with other modalities of therapy the signs and symptoms of the disease were abated. The dosage varied from as little as 0.5 Gm. every two to three days to 2.5 Gm. per day. The usual dosage, however, was 0.5 Gm. per day taken as a single dose. The details of treatment in case 17 are presented to illustrate a good response to the treatment and to demonstrate the laboratory evaluation carried out.

CASE 17.—A blistering eruption had developed in a 56-year-old man three months previous to admission. The eruption took the configuration of grouped bullae over the extensor surfaces of the arms, the anterior and posterior parts of the thorax, the buttocks, and the inguinal areas, and about the extensor surfaces of the knees. Rather intense pruritus and burning of the skin were associated symptoms. Prior to his being seen by us, steroid therapy had been administered without benefit.

The diagnosis of dermatitis herpetiformis was established on the basis of the clinical morphology of the eruption and a skin biopsy which showed a pressure or tension bulla without evidence of acantholysis.

Therapy was initiated with sulfamethoxypyridazine in a dosage of 0.5 Gm. given twice the first day and 0.5 Gm. given daily thereafter. Table 2 indicates the dosage of the drug and the blood levels achieved. On this dosage schedule there was good control of the dermatitis herpetiformis (fig. 1). During the period of observation blisters recurred a few times but these periods have been short-lived. On each of these occasions the patient could relate the relapses to long periods of hard physical labor.

Sulfamethoxypyridazine was given a clinical trial in nine patients with other dermatological diseases as follows: bullous pemphigoid, four patients; erythema multiforme, three; eczema nummulare, one, and lichen planus, one. A hemolytic

TABLE 2.—*Dosage and Blood Concentration of Sulfamethoxypyridazine in Patient in Case 17*

Date	Dosage, Oral, Gm.	Sulfamethoxypyridazine Level, Mg./100 Cc.
1/22	0.5 twice a day for 1 day; 0.5 a day thereafter	...
1/28	0.5 a day	2.4
2/5	1 twice a week; 0.5 on other days	4.5
3/25	1 every other day; 0.5 on alternate days	3.9
4/22	1 every other day; 0.5 on alternate days	5.3

process secondary to sulfamethoxypyridazine therapy developed in one of these patients, and her case will be presented in detail later in this paper. The lack of response to therapy in this group led us to believe that sulfamethoxypyridazine possesses no specific propensities for ameliorating dermatological diseases but that its therapeutic effectiveness is the antibiotic property ascribed to the sulfonamide group as a whole.

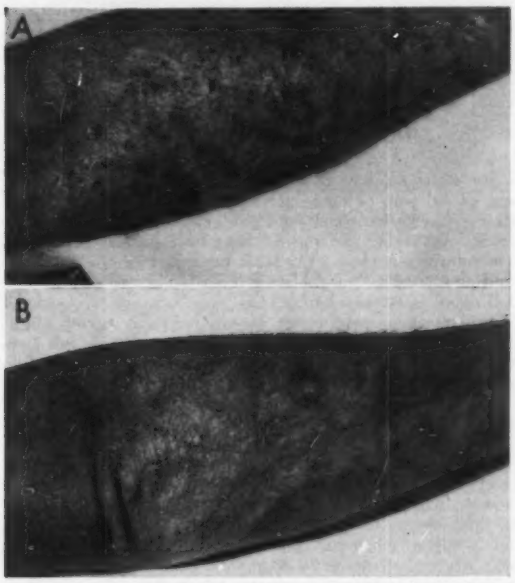


Fig. 1 (case 17).—Dermatitis herpetiformis: *A*, before treatment and, *B*, after 12 days of treatment with sulfamethoxypyridazine. This patient subsequently had leukopenia secondary to drug therapy.

Adverse Reactions

Adverse reactions to sulfamethoxypyridazine were encountered in some of the patients. Such reactions will, of course, detract from the over-all usefulness of the drug. Close observation of the patient during administration should, however, give early recognition to potentially serious reactions and prevent fatalities from occurring.

During the Second Conference on Sulfonamides, Lehr [1] reviewed the clinical toxicity of sulfonamides and listed the reactions as follows: (1) potentially serious reactions, including complications of the urinary tract, sensitization reactions (drug fever, rash, and contact reactions), blood dyscrasias, and hepatitis, and (2) milder reactions, including acidosis, cyanosis, and reactions related to the central and peripheral nervous systems.

It is interesting to note that, among the potentially serious reactions listed, only complications of the urinary tract have been unreported to date. Drug fever and cutaneous eruptions have been commonly reported, with headache and other complaints related to the central nervous system being not uncommon.

TABLE 3.—*Incidence of Adverse Reactions to Sulfamethoxypyridazine as Reported in Literature*

Author	No. of Cases	Reactions No.	%	Types
Jones, W. F., and Finland, M.: Ann. New York Acad. Sc. **69**:473, 1957	6	0	...	...
Lepper, M. H., and others: Ann. New York Acad. Sc. **69**:485, 1957	49	0	...	...
Jackson, G. G., and Grieble, H. G.: Ann. New York Acad. Sc. **69**:493, 1957	56	5	8.9	Headache, fever, eruption, abdominal pain, dizziness
Ross, S., and others: Ann. New York Acad. Sc. **69**:501, 1957	14	0	...	...
Walker, W. F., and Hamburger, M.: Ann. New York Acad. Sc. **69**:509, 1957	52	1	1.9	Eruption
Songco, R. S., and others: J. Philippine M. A. **33**:520, 1957	36	3	8.3	Vomiting, cutaneous eruption
Velasco-Joven, E. K., and Domingo, P.: J. Philippine M. A. **33**:584, 1957	3	0	...	...
Grieble, H. G., and Jackson, G. G.: New England J. Med. **258**:1, 1958	63	4	6.4	Headache and maculopapular eruption common; also fever, abdominal pain, dizziness
Lindsay, D. G., and others: A.M.A. Arch. Dermat. **78**: 299, 1958	85	13	15.3	Severe bullous eruption; other eruptions

Table 3 summarizes the clinical experience of other investigators with sulfamethoxypyridazine and the incidence of complications with this therapy. Tisdale [2] recently reported the additional complication of focal hepatitis in a patient receiving sulfamethoxypyridazine.

We observed a total of 28 patients—19 with dermatitis herpetiformis (one of the 20 patients had an unsatisfactory trial) and 9 with assorted dermatological conditions—and in this series five adverse reactions occurred. Case 14 was included in a preliminary report.[3] Sulfamethoxypyridazine afforded good control of this patient's dermatitis herpetiformis; however, pyrexia, arthralgia, and albuminuria developed, and these were interpreted as manifestations of a toxic reaction rather than a true reaction of hypersensitivity. When this patient

was dismissed from the clinic, his general health was considered good and laboratory evaluation reflected no abnormal finding. He died about 10 days later but, because autopsy was not performed, we can only speculate on the course of events.

The patient in case 9 had an initial good response to treatment with sulfamethoxypyridazine, but on his return home a generalized erythematous maculopapular eruption developed. The patients in cases 18 and 20 each demonstrated an initial good control of the disease, only to manifest subsequently an adverse reaction characterized by leukopenia. The details of case 18 follow.

CASE 18.—A 47-year-old man gave a history of a pruritic eruption, consisting of grouped vesicles and urticarial papules over the scalp, thorax, scapular areas, abdomen, and extensor surfaces of the elbows and knees, that had been present for about nine years. A diagnosis of dermatitis herpetiformis was made on the basis of the morphology of the skin lesions and a skin biopsy which showed pressure or tension bullae without evidence of acantholysis. In addition, patch tests with potassium iodide gave a positive reaction, and the eosinophil count on the peripheral blood was 3.5%. A variety of medicaments given systemically in the past had not achieved control of the condition. More recently, steroids had been tried without success.

TABLE 4.—*Dosage, Blood Concentration of Drug, and Leukocyte Count in Patient in Case 18*

Date	Dosage, Oral, Gm. per Day	Sulfamethoxypyridazine, Mg. per 100 Cc.	Leukocytes per Cu. Mm.
1/16	0.5 twice; 0.5 thereafter	...	5,400
1/22	0.75	3.9	4,000
1/28	0.75	2.1	4,000
2/13	0.75	2.1	3,100
2/20	0.75	2.3	3,700
3/13	1	2.6	4,100
4/12	Discontinued	3.3	2,800
4/24	...	0.15	4,200

When the patient was first seen, sulfamethoxypyridazine was administered in a dosage of one tablet (0.5 Gm.) twice a day for one day and then one tablet per day thereafter. Lack of complete control later necessitated increasing the dosage of the drug. Table 4 indicates the oral intake of the drug, the concentration of the drug in the blood, and the leukocyte counts.

While the patient was receiving sulfamethoxypyridazine, his dermatitis herpetiformis remained under good control. However, after a month of treatment with a dosage of 1 Gm. per day and the attainment of a leukocyte count of 2,800 per cubic millimeter of blood, it was considered that he had a toxic suppression of the leukocytes and treatment was discontinued. A subsequent course of sulfamethoxypyridazine therapy has not been attempted.

In the group of patients with miscellaneous diseases who were treated with sulfamethoxypyridazine, there was one in whom a hemolytic process developed, most probably on the basis of use of this drug. A summary of this case follows:

CASE 21.—A 64-year-old woman was admitted directly to the hospital for treatment of a generalized cutaneous blistering eruption that had been present for four months. Mucosal lesions had never been evident.

On admission, she presented a widespread bullous eruption without particular grouping; some of the bullae were seen to be arising from normal skin, while others were on an urticarial base. She had marked pruritus. Pertinent laboratory evaluation included a skin biopsy which showed a tension or pressure bulla without acantholysis. A definite diagnosis was not established. Thus, a variety of treatments, including use of sulfapyridine, diphenhydramine (Benadryl) hydrochloride, sulfamethoxypyridazine, and steroids, was instituted.

Because of lack of response to any one of these medications, a second course of sulfamethoxypyridazine therapy was given about three weeks after she had received the first course; this course consisted of 2 Gm. of the drug given daily in a single dose for eight days. Only partial control of the blistering was achieved.

On this dosage schedule the blood level of sulfamethoxypyridazine was 19 mg. per 100 cc. on Dec. 5, 1957, and, thus, administration of the drug was discontinued. When the level reached 3.5 mg. six days later, the drug was again administered in a dosage of 0.5 Gm. per day, and this dosage was continued for six additional days.

When the patient was admitted on Oct. 28, the hemoglobin level was 12.6 Gm. per 100 cc. of blood; on Dec. 3 and Dec. 7 it was 9.7 Gm.; and on Dec. 16, the day treatment with sulfamethoxypyridazine was permanently discontinued, it was 8 Gm. There was no corresponding decrease in the leukocyte count. The reticulocyte count on Dec. 16 was 7.2%. After two transfusions of 500 cc. of whole blood and inauguration of the daily administration of iron by mouth, there was a return of the blood value to normal within the next month.

The physicians of our clinic group referred patients with adverse cutaneous reactions from sulfamethoxypyridazine to us for dermatological consultation. A summary of one such case is given here because the case illustrates perhaps the commonest cutaneous reaction as recorded by those reporting adverse reactions to this drug.

CASE 22.—A 26-year-old man was treated for an "influenza syndrome" with sulfamethoxypyridazine given in a dosage of 0.5 Gm. twice a day. Twenty-four hours after initiation of therapy the patient experienced increased lassitude, fever, and chills, and the following day he had headaches. He interpreted these symptoms as a part of the influenza and continued taking the drug for a total of three and one-half days (seven doses of 0.5 Gm. each).

Twenty-four hours after he discontinued taking sulfamethoxypyridazine only general malaise persisted, but then a generalized, fine, erythematous maculopapular eruption developed which was accentuated on the trunk (fig. 2). No oral lesions were present. At this time (two and one-half days after use of the drug had been stopped) the blood level of sulfamethoxypyridazine was 5.4 mg. per 100 cc.

The patient gave no history of hay fever, asthma, or migraine headaches. A sulfonamide drug had been taken on one occasion previously without reaction, but in the past he had reacted to penicillin with urticaria. With antihistamines taken by mouth and soothing topical treatments, the skin reaction abated in 72 hours.

The entire group of sulfonamide drugs is known to produce fixed drug reactions, and sulfamethoxypyridazine is no exception in this regard. To our knowledge, a fixed drug reaction has not previously been reported, although there is no reason to presume it would not eventually occur.

CASE 23.—A 29-year-old woman had been receiving care for recurrent infections of the urinary tract. Prophylactic treatment with sulfamethoxypyridazine had been advised in a dosage of 0.5 Gm. given daily on five successive days during every two-to-three-week period. Her dermatological complaint was of an intermittent presence of a pruritic ery-

thematous plaque on the dorsum of the right third finger; this condition would persist for five to seven days and then disappear (fig. 3). It was only after direct questioning that she associated the skin eruption with the ingestion of sulfamethoxypyridazine. We interpreted her skin eruption as due

Fig. 2 (case 22).—Erythematous maculopapular eruption seen secondary to treatment with sulfamethoxypyridazine for influenza.

to a fixed drug reaction. She had taken sulfonamide drugs previously without untoward reaction. She gave no history of hay fever, asthma, migraine headaches, or urticaria.

Reactions of photosentivity can be anticipated in patients taking the sulfonamide drugs. A summary of such a case follows:

Case 24.—A 61-year-old farmer had had intermittent sore throat for four months. Among the drugs prescribed were tetracyclines, to one of which a cutaneous reaction developed. About five weeks prior to consultation with us, the patient took sulfamethoxypyridazine in a dosage of two tablets (1 Gm.) the first 24 hours and one tablet a day for the next four days. After this course of treatment an eruption developed on the sun-exposed portion of the body; this occurred during the period he was spending much time in the sun preparing his farm land for spring planting. Examination disclosed an eczematoid reaction of the face and ears (with sparing of the forehead) and of the dorsum of the hands and forearms. This patient gave no history of atopy but had previously had adverse reactions to a tetracycline preparation and to succinylsulfathiazole (Sulfasuxidine).

The employment of sulfamethoxypyridazine by us and other physicians, and our seeing the subsequent development of adverse reactions in some of these patients, alerted us to the fact that the drug was not without the potentialities of producing still other reactions which might in themselves be a more serious threat to the life of the patient than the original disease under treatment.

Comment

The unique pharmacological properties of sulfamethoxypyridazine are its low degree of acetylation and its slow renal clearance. The acetylated form is cleared faster from the blood than is the non-acetylated form. This medicament shares with sulfapyridine, sulfoxone (Diasone) sodium, and Promacetin (sodium 4, 4′-diaminodiphenylsulfone-2-*N*-acetylsulfonamide) a low degree of acetylation. The fact that drugs which suppress dermatitis herpetiformis have a common pharmacological property is of interest. The pharmacology and physiology of sulfamethoxypyridazine have recently been reviewed.[4]

In most cases the control of dermatitis herpetiformis may be readily achieved with sulfamethoxypyridazine. This control can be maintained with

Fig. 3 (case 23).—Fixed eruption occurring over dorsum of right third finger in patient taking sulfamethoxypyridazine as prophylaxis against recurrent infections of urinary tract.

low daily doses in most instances. Occasionally, a patient has taken as much as 2.5 Gm. a day to control his eruption without suffering ill-effects. The control is as good as that exercised by any of the other suppressive drugs used in the treatment of dermatitis herpetiformis.

The maintenance of high blood levels for 24 hours on a single dose of the drug as a result of its low renal clearance is of tremendous help in suppressing the eruption. In these circumstances it is possible for the patient to take one dose of the drug daily and for control to be maintained. It is a great convenience to patients, and, consequently, it is easier to gain their cooperation.

Just as it is impossible to predict the level of maintenance dose necessary to suppress the clinical reaction, it is similarly impossible to predict the blood levels achieved with any single unit dosage. While blood levels of 2 to 4 mg. per 100 cc. were obtained in most patients on daily maintenance doses of 0.5 Gm. of the drug, in some instances high blood levels were obtained with exactly similar dosages and in one instance a patient who was taking 2.5 Gm. per day had a relatively low blood level. Because of the danger of cumulative concentrations with the drug, routine studies of the blood and routine urinalyses should be made and also blood levels of sulfamethoxypyridazine need to be determined at various intervals to correlate the surface control with the unit dosage and the blood level achieved with that dosage. It seems apparent that this is the only safe way to administer this medicament over a long period.

The adverse reactions observed concerned principally the skin and hematopoietic system. In addition, the gastrointestinal and central nervous systems showed evidence of toxicity, as was described. The dermatological manifestations followed almost all known previously reported reactions to sulfonamide drugs. They all responded promptly to cessation of treatment with the drug and institution of appropriate therapeutic measures. No crystalluria has been observed. One original difficulty in the use of this medicament was the development of toxic reactions due to high blood levels. This included malaise, arthralgia, fever, and eruption. This type of reaction was perhaps the most serious encountered. There is no way of knowing precisely whether it contributed to the death of the one patient who, three weeks after having such a reaction and recovering satisfactorily as far as clinical and laboratory evidence was concerned, died suddenly under unusual circumstances described by the home physician as indicative of adrenal exhaustion.

The adverse reactions limit the usefulness of sulfamethoxypyridazine in therapeutic dermatology. However, it should be noted from the other series reported in table 3 and from our experience that the drug may be administered with a certain degree of safety once the method of administration is understood and treatment is given with appropriate safeguards, namely, determinations of the blood level of the drug, studies of its hematopoietic effects, and analyses of the urine. Without such safeguards it is obviously impossible to gauge the effectiveness of the medication or the possibilities of potential reaction. Drug reactions have always been a part of the administration of sulfonamide medicaments. In many instances they have been an accepted risk because of the usefulness of the particular medication. Sulfapyridine has an extremely poor pharmacological reputation. Yet, it is used routinely in dermatology for the suppression of dermatitis herpetiformis. We recently observed one patient who took 20 grains (1.29 Gm.) of sulfapyridine three times a week for 14 years without incident. The amount of sulfapyridine that is used in dermatology, in spite of the apparent pharmacological hazards, indicates that a drug may be useful in certain areas of medicine once its limitations and dangers are fully appreciated.

Summary and Conclusions

Adverse reactions to sulfamethoxypyridazine in this study were due to the toxic effect of cumulative dosage; these involved principally the hematopoietic and cutaneous organs. To our knowledge, a fixed drug reaction and the reaction of photosensitivity to sulfamethoxypyridazine have not previously been reported.

Sulfamethoxypyridazine was found to afford good control of dermatitis herpetiformis in 10 of 20 patients. Therapeutic control of the eruption was achieved in most instances with a single daily maintenance dose. There is no predictability in the relationship between the dose administered and the blood level obtained over long periods. Therefore, the administration of this drug requires routine assay of the blood for sulfamethoxypyridazine levels.

References

1. Lehr, D.: Clinical Toxicity of Sulfonamides, Ann. New York Acad. Sc. **69**:417-447 (Oct. 12) 1957.

2. Tisdale, W. A.: Focal Hepatitis, Fever and Skin Rash Following Therapy with Sulfamethoxypyridazine, Long-Acting Sulfonamide, New England J. Med. **258**:687-690 (April) 1958.

3. Perry, H. O., and Winkelmann, R. K.: Dermatitis Herpetiformis Treated with Sulfamethoxypyridazine: Preliminary Report, Proc. Staff Meet. Mayo Clin. **33**:164-165 (April 2) 1958.

4. Jackson, G. G., and Grieble, H. G.: Sulfamethoxypyridazine: Pharmacological Observations and Clinical Use in Treatment of Urinary Tract Infections, Ann. New York Acad. Sc. **69**:493-500 (Oct. 12) 1957. Nichols, R. L.; Jones, W. F., Jr.; and Finland, M.: Sulfamethoxypyridazine: Preliminary Observations on Absorption and Excretion of New, Long-Acting Antibacterial Sulfonamide, Proc. Soc. Exper. Biol. & Med. **92**:637-640 (July) 1956. Boger, W. P.; Strickland, C. S.; and Gylfe, J. M.: Sulfamethoxypyridazine (Kynex) New Long-Acting Sulfonamide, Antibiotic Med. **3**:378-387 (Nov.) 1956. Nichols, R. L., and Finland, M.: Absorption and Excretion of Sulfamethoxypyridazine: New, Long-Acting Antibacterial Sulfonamide, J. Lab. & Clin. Med. **49**:410-421 (March) 1957. Roepke, R. R.; Maren, T. H.; and Mayer, E.: Experimental Investigations of Sulfamethoxypyridazine, Ann. New York Acad. Sc. **69**:457-472 (Oct. 12) 1957. Finland, M.; Jones, W. F., Jr.; Ziai, M.; and Cherrick, G. R.: Sulfamethoxypyridazine: Concentrations in Blood and Urine During Oral Administration of Various Dosages, Am. J. M. Sc. **234**:505-516 (Nov.) 1957.

CLINICAL NOTES

PRESERVATION OF NATURAL LANDMARKS IN UNILATERAL CLEFT LIP

D. Ralph Millard Jr., M.D., Miami, Fla.

The harelip deformity, with its twisted distortion of the nose and gaping cleft of the lip, utterly disfigures the center of the face and destroys any chance of normal expression—even a smile is grotesque. So horrible is it that whatever the surgeon does will be an improvement. Yet, mere improvement is not enough and should not be accepted as a triumph. Rather, it is felt that, until these anomalies can be prevented, the surgical approach must be designed artistically so as not only to obtain a closure of the cleft but to camouflage it.[1]

Five years ago there was a constant trickle of patients with harelip to Kum Chon Korean Hospital, which services the population from a multitude of hutted villages in an area north of Seoul. Various degrees of this deformity were represented, and, after months of exposure to and stimulation from the problem, it began to dawn on me that all components of a normal lip and nose were more or less present in each person with cleft lip, depending on the severity of the deformity.

The Operation

If this were true, the primary step in construction would be to recognize all existing landmarks and juggle them out of distortion into normal position. Closer observation revealed, on the noncleft side, two-thirds of the cupid's bow, one philtrum column, and the associated dimple. As an entity they are drawn up toward the columella in an almost unrecognizable distortion (fig. 1*X*), but they are available and should be brought into use by a rotation incision under the columella that will drop the entire component *A* into correct position (fig. 2). This action will leave a triangular gap under the base of the columella which can be filled by a triangular advancement from the cleft side.

The cleft side, being primarily deficient, should not be called on to do more than is absolutely necessary. Yet, quite effectively and without undue strain, it can produce from its upper portion an adequate triangular flap to match the rotation gap. Of course, when the cleft is incomplete the bridging portion easily forms the leading point of the triangular flap *B* (fig. 2*W*). When the cleft is wide, a relaxing incision under the alar base is carried up into the nostril floor to pick up the point of the triangular flap *B*, which is to be advanced from the lateral lip element (fig. 2*X*). The advancement of this lateral triangular flap *B* not only fills the gap under the columella but also has a narrowing effect on the flaring alar base and wide nostril floor (fig. 1*Y* and *Z*). To facilitate this lateral advancement

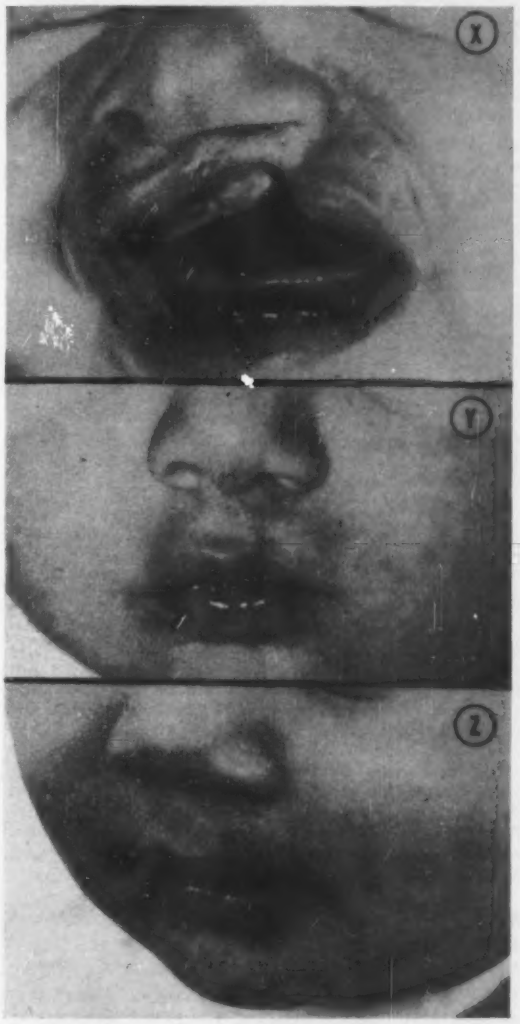


Fig. 1.—*X*, natural landmarks are distorted but present. *Y*, one month after surgery, cupid's bow and philtrum dimple have been maneuvered into normal position. Curving scar is still angry and slightly contracted. *Z*, three months later the scar has paled, smoothed out, and all but disappeared into the philtrum line.

From the Department of Surgery, University of Miami School of Medicine.

the lip and nose on the cleft side must be freed from their attachment to the maxilla by extensive undermining. Closure must be meticulous and pinpoint accuracy achieved in the approximation of the cleft at the white rolled edge of the cutaneous junction with vermilion. Chromic catgut sutures, 00000, are used in the muscle and mucosa membrane and silk sutures, 000000, in the skin.

Postoperative Care

A Logan bow is applied to protect the lip during the healing phase, and the suture line is sealed off from nasal discharge with bacitracin ointment three times daily.[2] Formula feedings are resumed as described by MacCollum and Richardson [3] with a 1½-in. extension of soft rubber catheter fitted to the end of a 10-cc. Asepto syringe. The catheter is eased in over the tongue, and constant pressure on the bulb produces a gentle flow of formula without the necessity of the healing lip puckering into traumatic sucking movements. The arms are restrained to keep the hands out of the mouth, and in the more acrobatic babies the legs are restrained to keep the feet out. On the fourth postoperative day the skin sutures are removed, and after one month the mother is instructed in gentle massage of the lip scar against the underlying gum with lanolin. For many weeks the scar will be hard, red, and slightly contracted (fig. 1*Y*), but as the months pass it will soften, relax, and pale out until it is almost invisible in its position as a philtrum line (fig. 1*Z*).

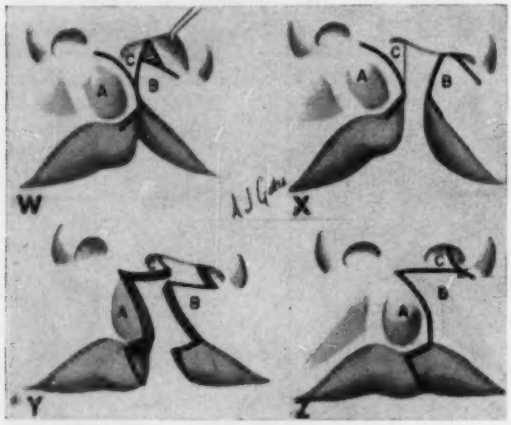


Fig. 2.—*W*, in incomplete clefts, lateral advancement flap *B* incorporates Simonart's band as its leading point. *X*, in complete clefts the lateral advancement flap *B* is developed by relaxing incision under alar base and picks up its leading point from lateral nostril floor. *Y*, flap *A* is rotated down and flap *B* advanced across cleft into rotation gap. Little flap *C* completes puzzle by interdigitating across floor of nose to straighten deviated columella, form nostril sill, and shoulder part of tension of lateral advancement. *Z*, Cupid's bow and entire philtrum dimple are now in normal position. Alar flare has been corrected. Resulting scar first curves to imitate the opposite philtrum column, then zig-zags out of sight as nostril sill and into nasal floor.

Timing the Operation

The optimum time for closure of cleft lip varies. If the deformity is minimal, operation can follow birth by a few hours. In my opinion this dash from womb to operating room is unnecessary, no matter how urgent the cosmetic emergency may seem. With an Asepto harelip feeder, feeding is no problem. Anxious parents can be pacified if it is explained that not only will the infant withstand anesthesia and operation better at 1 month of age but a more perfect lip and nose correction is likely to result.

If the cleft is severely wide, I feel it is extremely important to let the infant's tissues grow and enlarge for at least three months, after which surgical closure is relatively simple. When there is an associated cleft of the palate the principle of early closure as championed by Kilner [4] is favored. Palate clefts, in my opinion, should be corrected before the child begins to talk, anywhere from 10 to 12 months, depending again on the severity of the cleft. A gentle, well-planned operation should have minimal effect on the growth of the facial bones and still provide the child, from the outset, with an adequate mechanism with which to develop normal speech.

Summary and Conclusions

It never ceases to be a thrill that two simple incisions can set up a consecutive chain of happy actions: 1. The cupid's bow component, carrying with it one philtrum column and the entire dimple, drops into normal position, leaving a triangular gap above. 2. Advancement of the lateral lip element to fill this gap not only narrows the alar flare and wide nostril floor but unites the cleft along a curving line which simulates the one missing link, the matching philtrum column.

Several popular methods in use today ignore one or more of nature's landmarks and, what seems even more tragic, by actually destroying them in the primary repair cause them to be lost forever.

2121 Biscayne Blvd. (37).

References

1. Millard, D. R.: Primary Camouflage of Unilateral Harelook, in Transactions of the International Society of Plastic Surgeons, First Congress, Baltimore, Williams & Wilkins Company, 1957, p. 160; Radical Rotation in Single Harelip, Am. J. Surg. **95**:318-322 (Feb.) 1958.

2. Meleney, F. L.: Personal communication to the author. Meleney, F. L., and Fomon, J. J.: Ways and Means of Preventing and Minimizing Surgical Infections, Am. Surgeon **23**:883-890 (Oct.) 1957.

3. MacCollum, D. W., and Richardson, S. O.: Management of Patient with Cleft Lip and Cleft Palate, Pediatrics **20**:573-582 (Oct.) 1957; Care of Child with Cleft Lip and Cleft Palate, Am. J. Nursing **58**:211-216 (Feb.) 1958.

4. Kilner, T. P.: Personal communication to the author; Management of Patient with Cleft Lip and/or Palate, Am. J. Surg. **95**:204-210 (Feb.) 1958.

AN IMPROVED VAGINAL APPLICATOR

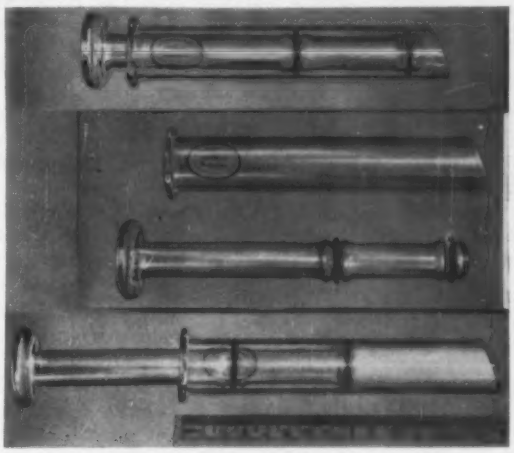
J. Peyton Barnes, M.D., Houston, Texas

The office treatment of vaginal disorders by the local application of various powders, creams, and jellies is common practice. Most of the jellies, creams, and such are injected with syringe-type applicators usually supplied by the pharmaceutical manufacturers of the drug being used.

The placement of different powder preparations is not satisfactory, as a rule. The plastic squeeze containers, which are used to blow a stream of powder into the vagina, succeed in filling the speculum, but a minimum amount of the powder remains in the vagina itself. Another type, which blows up the vagina under pressure and forces the powder in simultaneously, seems too dangerous for use. The applicator shown (see figure) was designed to overcome certain difficulties. It will deliver a definite measured amount of any kind of preparation to the far end of the vagina without the slightest waste, under no pressure, and with no discomfort to the patient. It should be remembered, however, that some risk accompanies the use of this or any other such device in pregnant women. No instance of trouble, such as embolism, has thus far occurred in such cases with this device, but the possibility should be kept in mind.

It is a syringe made of heavy Pyrex glass, with a beveled end to facilitate insertion (see figure, *top*). The plunger, when pushed in as far as possible, automatically stops and simultaneously empties the barrel completely (see figure, *center*). The plunger has two neoprene rubber rings so arranged that the glass of the plunger does not touch the inside of the barrel. The applicator is easily sterilized and would be hard to break.

To use, the plunger is withdrawn and a little lubricant jelly is placed on each neoprene ring and the plunger replaced. The chosen amount of the selected medicament is then put in the barrel with the plunger drawn back (see figure, *bottom*), the tip of the barrel is lubricated slightly, and the tip is then inserted to the proper location, the plunger pushed all the way down, and the syringe withdrawn.



Top, applicator almost closed. When plunger is pushed in as far as possible, barrel is automatically emptied. *Center*, note construction of plunger. Glass side of plunger does not come in contact with inside of barrel and rides squarely on the two rings. *Bottom*, rings have been lubricated and barrel filled with desired amount of powder.

This applicator is very simple to use, is of rugged construction, has maximum efficiency, and can be used with any preparation. It can be supplied in any desired dimensions, though the size shown is the adult size generally used.

617 Medical Towers (25).

This applicator is manufactured by Scientific Glass Blowing Company, Houston, Texas.

LIPOPROTEINS.—Some gerontologists claim that atherosclerosis is a natural process of aging. The possibility of the occurrence of coronary artery disease at any age, even in childhood, and the failure of finding atherosclerosis in some individuals attaining the age of eighty or more years, leads one to suspect that atherosclerosis is a disease state rather than a natural process. The present popular concept is that it is an alteration of fat metabolism. The plasma lipids in man are made up principally of esters of fatty acids and glycerol, which are the neutral fats or triglycerides, phospholipids, which are fatty acids in combination with phosphorus and nitrogen compounds, cholesterol, and cholesterol combined with fatty acids or cholesterol esters and free fatty acids. These lipids are too insoluble in water to exist in solution in the body fluids and therefore with the exception of fatty acids they are combined with globulin, forming a group of large molecular substances called "lipoproteins."—J. H. Hodges, M.D., Cholesterol and Vascular Disease, *The West Virginia Medical Journal*, October, 1958.

DIAGNOSTIC PROBLEMS

ERYTHREMIA (POLYCYTHEMIA VERA), RADIATION THERAPY, AND LEUKEMIA

Clinical Pathological Conference (PM 1187-57), Oct. 24, 1957, from the Department of Pathology and the Hektoen Institute for Medical Research of Cook County Hospital, Chicago, presented for publication by Daniel S. Kushner, M.D., and Paul B. Szanto, M.D.

Clinical Data

A 37-year-old woman was admitted to Cook County Hospital on July 31, 1957, complaining of shortness of breath, loss of appetite, and a rash. Two weeks before admission, she developed an eruption consisting of large tender "knots" mainly over the knees and anterior aspect of the legs, with only a few on the arms. The lesions progressively increased in size and number for about a week, then gradually regressed. At the height of the eruption, she complained of anorexia, nausea, and night sweats and had a temperature of 100 to 101 F (37.8 to 38.3 C), with one elevation to 103.2 F (39.5 C). She had no chills or joint pains. On the day before entry, she noted increasing substernal pain, aggravated by deep breathing, and a harsh, rasping, nonproductive cough. During the present illness, she also had complained of weakness, dizziness, exertional dyspnea, orthopnea requiring two to three pillows, loss of taste for cigarettes, nocturia (two times), and "reddish" urine. She admitted to ordinarily drinking only an occasional beer.

She had been closely followed in another clinic for six years. In 1950, she inadvertently noted a mass in the left upper abdominal quadrant that was regarded by her physician as an enlarged spleen. In February, 1951, she suffered a fall, and, in the course of examination at the other clinic, splenomegaly (20 cm.) and erythremia (polycythemia vera) were observed.

Basal metabolism and I^{131} uptake were normal. Sternal marrow aspiration revealed cellular marrow, increased megakaryocytes, and erythrocyte-leukocyte ratio of 1:1, normoblastic erythropoiesis, toxic granulopoiesis, moderate increase in histiocytes, and platelet clumps. About 20 phlebotomies were performed between 1951 and 1953. In 1952, radiation therapy to the spleen was followed by some decrease in its size. Subsequently, the extremities were irradiated. For one year, she was given triethylene melamine (TEM). In June, 1954, bone marrow aspiration revealed no spicules and large numbers of megakaryocytes among the fibrous strands, and cortisone was given. TEM was again given from March to November of 1956. An intravenous pyelogram showed a hypoplastic left kidney, compensatory hyperplasia of the right kidney, and splenomegaly. During these six years of clinical observation, the patient had remained entirely free of symptoms. History revealed only tonsillectomy in 1950, and treatment for "pus tubes" in 1943. The patient's father died of diabetes and her mother of hypertension.

Physical examination revealed a thin, young woman, appearing acutely and chronically ill. Her temperature was 101 F (38.3 C), pulse rate 120 per minute and regular, and blood pressure 90/60 mm. Hg. Scattered over the anterior aspect of both legs and the ulnar aspect of the right arm were several deep cutaneous nodules (2 by 2 cm. in diameter), which were indurated and tender but not discolored. The superficial cervical veins were slightly distended. The heart and lungs were normal. The spleen extended four fingerbreadths below the costal margin. The liver edge was just palpable. No other masses were palpated. The abdomen was soft and nontender and intestinal sounds were normal. Rectal, pelvic, and neurological examinations were normal.

Urinalysis was negative. Results of hematological examinations are shown in the table. The blood Kahn test was negative. A roentgenogram of the chest taken July 13, 1957, revealed normal heart and lungs; views of the left shoulder taken Aug. 22 were normal. An electrocardiogram was unremarkable, except for sinus tachycardia. The blood nonprotein nitrogen level was 36 mg. per 100 ml., glucose level 158 mg. per 100 ml., total serum proteins 5.4 Gm. per 100 ml., albumin level 4.4 Gm. per 100 ml., globulin level 1.0 Gm. per 100 ml., gamma globulin level 0.79 Gm. per 100 ml., cholesterol level 78 mg. per 100 ml., and cholesterol esters 39%. Cephalin flocculation was negative, thymol turbidity 4.1 units, icterus index 9 units, alkaline phosphatase level 3.1 Bodansky units, and blood uric acid level 9.1 mg. per 100 ml. A urine culture taken Aug. 1 produced Klebsiella, aerogenes type, sensitive to tetracycline, chloramphenicol, streptomycin, nitrofurantoin, and sulfisoxazole. Agglutinations for typhoid, paratyphoid, and brucella were negative. A

Dr. Kushner is Associate Director of Medical Education, Cook County Hospital, and Instructor in Medicine, Northwestern University Medical School; Dr. Szanto is Director, Department of Pathology, Cook County Hospital, and Professor of Pathology, Chicago Medical School.

Dr. Schwartz is Director, Department of Hematology, Cook County Hospital, and Associate Professor of Medicine, Northwestern University Medical School.

blood culture taken Aug. 7 revealed a hemolytic Staphylococcus pyogenes var. albus (coagulase negative). On three subsequent occasions hemolytic Staphylococcus pyogenes var. aureus (coagulase negative) was cultured. The first of these was taken while the patient was receiving tetracycline therapy and the others while she was receiving streptomycin and para-aminosalicylic acid (PAS). The organism was sensitive to penicillin, erythromycin, tetracycline, and chloramphenicol. A direct Coomb's test and lupus erythematosus preparation were negative. Aspirations of sternum and iliac crest were performed Aug. 1, but no marrow elements were obtained. On Aug. 5 a surgical biopsy of the sternum was performed and revealed small clusters of anaplastic cells (stem cells or blasts).

Urinary urobilinogen was still negative. Cortisone therapy (200 mg. a day) was begun on the 10th day, after which the right ankle pains entirely subsided. Again, symptomatic improvement was gratifying, and, for the next 10 days, her temperature remained between 99 and 100 F (37.2 and 37.8 C). A Mantoux skin test (1:1,000) was negative. Therapy with PAS was begun, and streptomycin therapy was continued.

On the 20th day, new, tender, deep, cutaneous nodules appeared. The spleen had enlarged to the iliac crest and extended 8 to 10 fingerbreadths below the costal margin. She began to complain of left shoulder pain, accompanied by tenderness and warmth, and her temperature rose to 103 F (39.4 C). The administration of eight tablets of colchicine

*Hematological Data**

Date	Hemoglobin Level, Gm.	Hemoglobin Level, %	Red Blood Cell Count, per Cu. Mm.	White Blood Cell Count, per Cu. Mm.	Hematocrit Reading, %	Neutrophils, %	Band Forms, %	Basophils, %	Lymphocytes, %	Monocytes, %	Blasts, %	Promyelocytes, %	Myelocytes, %	Metamyelocytes, %	Histiocytes, %
1951†	16.7	...	8,700,000	17,500	51	78	...	...	21	...	...	...	...	...	...
1952	11.7	...	6,600,000	21,600	...	80	7	...	11	2	...	...	...	...	...
1953	13.0	...	6,500,000	10,000	45	...	...	...	...	...	...	...	...	...	...
1954	15.6	...	5,100,000	2,000	51	...	...	...	...	...	...	...	...	...	...
1955	...	...	...	1,600	30	...	...	...	...	...	...	...	...	...	...
2/1/56	...	...	...	8,200	53	...	...	...	...	...	...	...	...	...	...
8/9/56	...	...	...	3,850	34	...	...	...	...	...	...	...	...	...	...
2/2/57	...	...	...	2,500	35	...	...	...	...	...	...	...	...	...	...
6/12/57	...	...	...	3,000	35	...	...	...	...	...	...	...	...	...	...
7/31/57	...	...	2,200,000	...	43	...	...	...	...	...	...	...	...	...	...
8/1/57	...	...	...	4,400	...	13	5	1	38	12	14	7	4	6	...
8/2/57	...	42	2,950,000	3,100	...	...	...	...	...	...	...	...	...	...	...
8/7/57	...	37	3,000,000	4,900	...	19	20	...	17	43	3	4	3	1	...
8/13/57	...	45	3,000,000	16,000	...	9	5	...	28	18	21	8	9	12	...
8/24/57	...‡	37	2,630,000	14,900	...	15	3	3	28	15	15	11	3	16	3
8/29/57	...	30	2,030,000	40,400	...	4	2	1	32	5	28	13	4	10	1
8/31/57	...	44	3,000,000	...	...	...	...	...	...	...	...	...	...	...	...

* Blood showed anisocytosis, poikilocytosis, hypochromia, microcytosis, polychromatophilia, stippling, few nucleated red blood cells, Dohle bodies, burr cells, tear drop cells, and toxicity.
† Platelet count was 340,000 per cubic millimeter and eosinophils 1%.

On the day after admission, the patient complained of severe substernal pain which radiated to the back, accompanied by dyspnea and restlessness. Two blood transfusions produced marked symptomatic improvement. Her temperature, initially 101 F (38.3 C), rose progressively in the first 10 days to 105 F (40.6 C), despite the successive administration of tetracycline, penicillin, and streptomycin. On the seventh day, a chill was followed by a temperature rise to 105 F (40.6 C) and a complaint of severe pain in the right foot. An area of exquisite tenderness, slight swelling, and warmth was noted on the lateral aspect of the foot, beneath, and just posterior to the malleolus. A harsh grade 3 systolic murmur was heard at the base of the heart. No petechiae were seen. Penicillin therapy (1,200,000 units a day) and streptomycin therapy (1 Gm. a day) were continued. The spleen now extended six to seven fingerbreadths below the costal margin. produced dramatic relief of pain. Prednisone, 20 mg. per day, was substituted for cortisone, and the patient was placed on a Sippy regimen. Because of persistence of fever, penicillin therapy was reinstituted (1,200,000 units per day), with apparent response. Consequently, and in view of the repeated isolation of staphylococci from the blood, 20 million units of penicillin were given daily in intravenous infusion. Although three additional blood transfusions and 10 cc. of gamma globulin were given supportively, her temperature rose to levels between 101 and 104 F (38.3 and 40 C); she became increasingly dyspneic and tachypneic and complained of severe splenic pain. Her blood pressure fell to 78/50 mm. Hg, and her pulse rate was 120. The liver extended four to five fingerbreadths below the costal margin. The spleen extended into the pelvis, and epigastric tenderness was noted. The basal cardiac murmur persisted, and P_2 was noted

to be loud and split. A loud to-and-fro friction rub was heard over the liver. Slight ankle edema was present. She was given oxygen and digitalis but died Aug. 31 after six weeks of acute illness.

Clinical Discussion

Dr. Steven O. Schwartz: The problem for discussion is that of a 37-year-old woman with a six-year history of illness, beginning with an asymptomatic

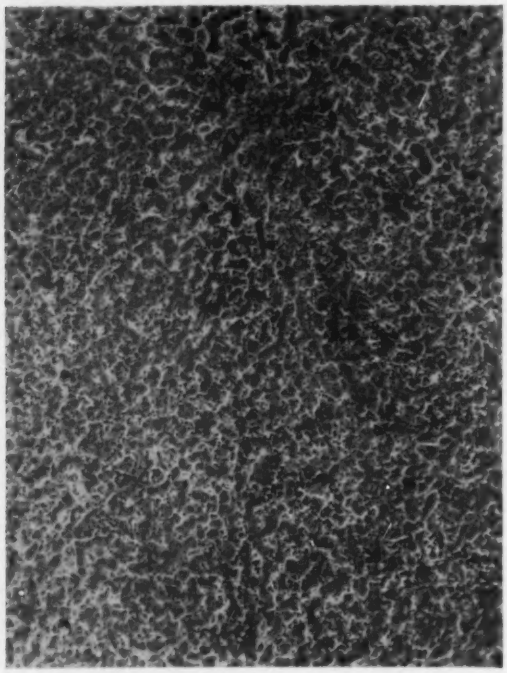


Fig. 1.—Section of liver showing accumulation of mononuclear cells in the sinusoids. Cell types at this magnification cannot be identified.

splenomegaly and erythremia, who was vigorously treated and whose course terminated with six weeks of acute illness, characterized by an erythema nodosum, fever, sweats, arthritis, hyperuricemia, severe anemia, cardiac murmurs, staphylococcemia, pericarditis, cardiac failure, and invasion of the blood by primitive cells. The question is not why this patient died but rather why she developed an acute leukemia and what the preexisting disease was for which she was so extensively treated.

To begin with, one is reluctant to accept the diagnosis of a polycythemia vera in a 30-year-old woman, even though she had a splenomegaly and erythremia, because this is not a disease of the young, but usually of older persons. One then considers other possible bases for erythremia and splenomegaly. First, there is tuberculosis of the spleen, as the consequence of hematogenous dissemination. Against this are the negative chest roentgenogram and her failure to respond to rather vigorous antituberculous therapy. She also had a negative tuberculin skin test. Admittedly, this was done only in a 1:1,000 dilution and, therefore, some might question its validity, and one must also recognize the possibility of anergy in miliary tuberculosis. Finally, in the repeated studies, there were no radiologically demonstrable calcifications in the spleen. On the basis of these factors, it is unlikely that she had tuberculosis of the spleen.

The second possibility is that we are dealing with a myelofibrosis and a compensatory metaplasia in the spleen and erythremia, but the fact that in 1951 she had a normal marrow, with normal myelocyte production, excludes this diagnosis. Therefore, we must conclude from the evidence presented that her original disease, in 1950, was indeed a polycythemia vera, rather early and well compensated. It should again be emphasized that at that point diligent attempts should have been, and probably were, made to rule out the possibility that this was a primary tuberculosis of the spleen. The question next arises as to why this patient was so energetically treated.

Fig. 2.—Section of spleen showing replacement of splenic parenchyma by fairly uniform type of cells. Megakaryocytes are scattered throughout.

At no time did she have symptoms. Certainly, to give such intensive x-ray and TEM therapy at the age of 30 as to produce profound leukopenia which lasted over the period from 1954 to 1957 was hardly justifiable, regardless of one's therapeutic enthusiasm. Nonetheless, in spite of the enlarged spleen, the patient apparently got along fairly well until 1957, when she developed an acute leukemia.

There are a number of theoretical explanations but no factual explanations. Therefore, we must resort entirely to hypothesis. The first and the simplest is to say that this was a polycythemia vera which developed into leukemia after six or seven years. There is a popular misconception that 10% of patients with polycythemia develop leukemia. If, however, one studies the literature carefully, one finds that patients with polycythemia, who eventually develop leukemia, have at some time been treated with one form or another of radiation therapy. Even more interestingly, with orthodox x-ray therapy, it takes about five years for the development of leukemia, and usually this is a chronic rather than an acute leukemia. This record has been improved on, since it is now possible to produce acute leukemia in two years. The minority opinion, therefore, in this controversial matter, is that x-ray treatment in polycythemia vera is not only not the treatment of choice but is definitely contraindicated.

If one accepts the thesis that this patient had polycythemia vera and, in some way related to intensive and prolonged radiation therapy, subsequently developed leukemia, we must deal still with the question of why the leukemia developed. The TEM might also have played some role in its development.

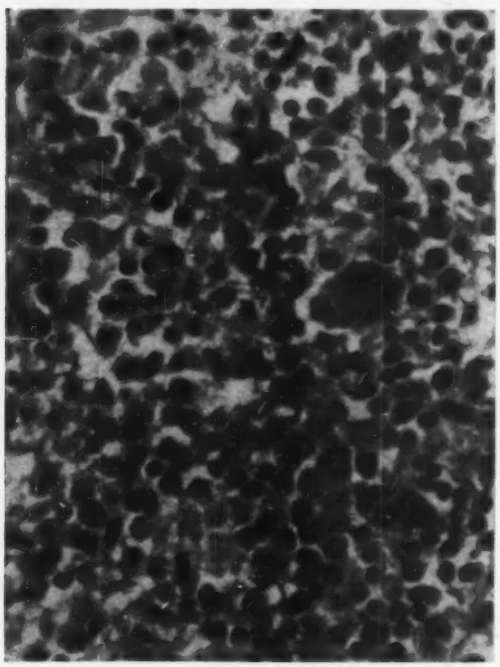


Fig. 3.—Higher magnification. Many cells belong to myeloid series—myeloblasts and myelocytes.

If one does not believe that this patient had a preexisting disease which predisposed her to develop leukemia, then one must find still another explanation. The concept of the myeloproliferative disease syndromes, currently in vogue, permits one to accept an initial proliferation of the erythrocytes, later proliferation of fibrous tissue elements, and eventually proliferation of the white blood cells. One could also look on x-rays as carcinogenic and think of the leukemia in this patient as having been produced by the x-rays. One might assume, however, that the roentgen radiation simply predisposes these patients to the development of leukemia. This seems to us the most interesting of all the hypotheses. We know that leukemia develops much more frequently in those who have been exposed extensively to roentgen rays than in the whole population. Unless one thinks of x-rays as being carcinogenic, one must assume that the x-rays simply make these people more susceptible to leukemia.

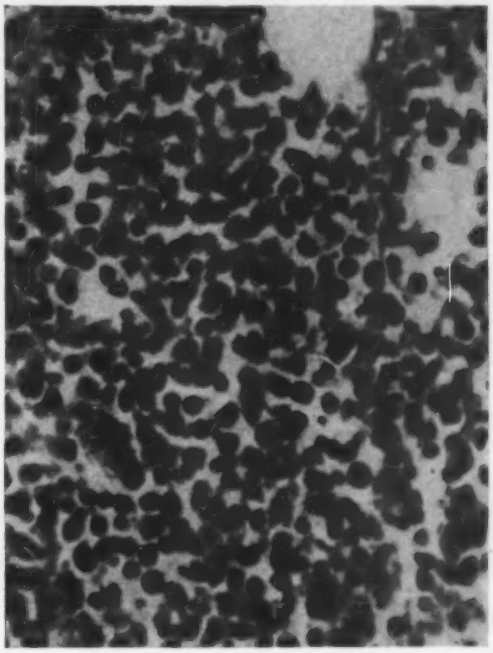


Fig. 4.—Section of bone marrow showing fatty marrow of femoral diaphysis replaced by very cellular erythromyelopoietic tissue. Many cells are myeloblasts and myelocytes. Smaller cells with black nuclei are normoblasts.

If it makes them more susceptible, then the question is, what is leukemia? How does this fit into the whole concept of leukemia? Leukemia is nothing more than a proliferation of the various cells normally present in the body, either as a result of the carcinogen effect of x-ray producing theis myeloproliferative disease, or, it may be a proliferative response to some insult to which the x-ray radiation has made the organ system susceptible. I like to think that this is what happened in this patient. Her resistance in the course of years, both as a

result of the x-ray and the TEM therapy, was gradually reduced. The fact that she appeared chronically ill implies that before the clinical manifestations became obvious and before she came under observation, she had already been ill for some time. Then, having been made susceptible to the

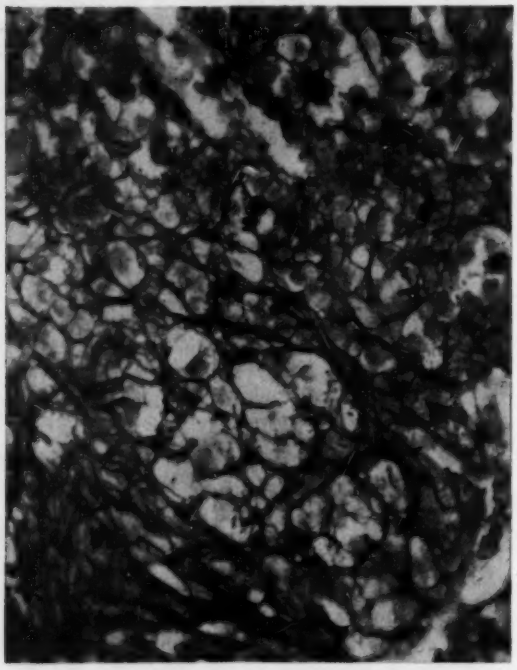


Fig. 5.—Section of bone marrow showing numerous reticulum fibers and collagen fibers.

development of leukemia, she developed it terminally as a result of her granulocytopenia. She certainly became susceptible to gross bacterial infections. She developed a bacteremia as evidenced by both the urine and blood cultures. I would be surprised if she did not, in addition, have liver abscesses. She died in cardiac failure, probably with pulmonary edema. One interesting point is that in 1951, the basal metabolism and the I^{131} uptake were normal, but at the time we saw her, she had weight loss, increased oxygen demand, and a high blood uric acid level, indicative of an increased metabolic demand and rapid nucleoprotein turnover.

Dr. S. Howard Armstrong, Jr.: Why did this patient die? Her hematological abnormalities hardly seem sufficient to explain the precise cause of death.

Dr. Schwartz: I think she died of cardiac failure and pulmonary edema, which I assume to be on the basis of myocardial failure secondary to the long duration of the illness, the moderately severe anemia, the increased metabolic demands of the underlying leukemia, and the terminal acute sepsis.

Dr. Armstrong: Could anything have been responsible other than what was defined bacteriologically? With regard to the isolation of staphylococci from the blood, in light of the skin lesions so suggestive of erythema nodosum, we can make three kinds of divisions. The fulminant coagulase-positive yellow staphylococci cause petechiae. These can go on to become white centered and resemble pyoderma, and the coagulase-negative staphylococci, which rarely cause septicemia, can produce a sort of granular erythema nodosum type of lesion from which staphylococci can be cultured early. Also, the hypoplastic kidney on one side, with a big kidney on the other, is a common observation in pyelonephritis. One must still dispose of the problem of a leukemoid response to severe infection.

Dr. Schwartz: The thing that prejudiced us against the purely bacteriological components of this case is that one of our group who saw the patient noted that she did not appear toxic, in spite of the severity of her illness. This suggested a terminal leukemia rather than infection.

Dr. Armstrong: This is important.

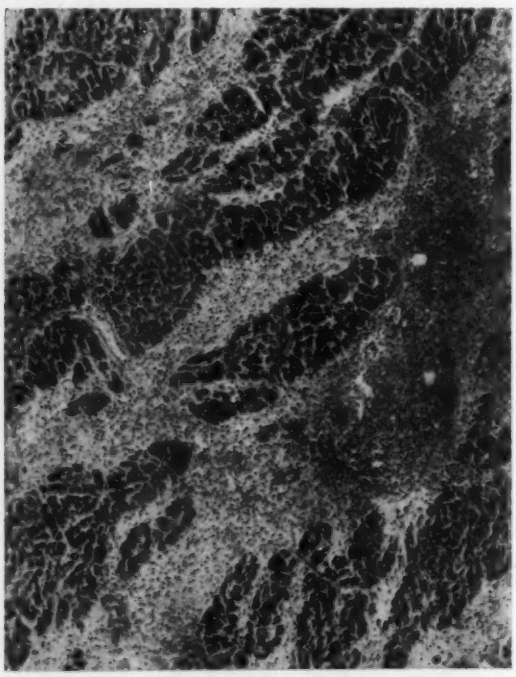


Fig. 6.—Section of myocardium showing infiltration by mononuclear cells belonging to myeloid series.

Dr. Harold Schoolman: What is the relationship of myelofibrosis to leukemia, and, could this patient have had this leukemia seven years before it became manifest?

Dr. Schwartz: With regard to the question of whether myelofibrosis antedates leukemia, in this patient the myelofibrosis was demonstrated first, so

the answer is, yes, it can and did. This, however, must be modified by an explanation of what causes myelofibrosis, since we often see an acute leukemia in the so-called aplastic phase, which is similar to myelofibrosis. The second question is, could she have had the leukemia seven years ago. There is no evidence that she did. In the protocol, the marrow was described seven years ago as having a 1:1 ratio with no abnormal granulopoiesis, and I cannot interpret that, even in retrospect, as leukemia.

Question: Would it be pertinent that this patient complained of ankle pain and swelling and developed an area of exquisite tenderness and pain on the lateral aspect of the foot, beneath the lateral malleolus, and then responded dramatically to colchicine?

Dr. Schwartz: With a 9.1 mg. uric acid and a dramatic response to colchicine, in spite of the fact that this was in a woman, and in spite of the fact that she was 37 years old, I would have no quarrel with a diagnosis of secondary gout.

Clinical Diagnosis.—The final clinical diagnosis was acute granulocytic leukemia developing as a result of radiotherapy of a previous polycythemia vera and terminal staphylococcal pyelonephritis and septicemia.

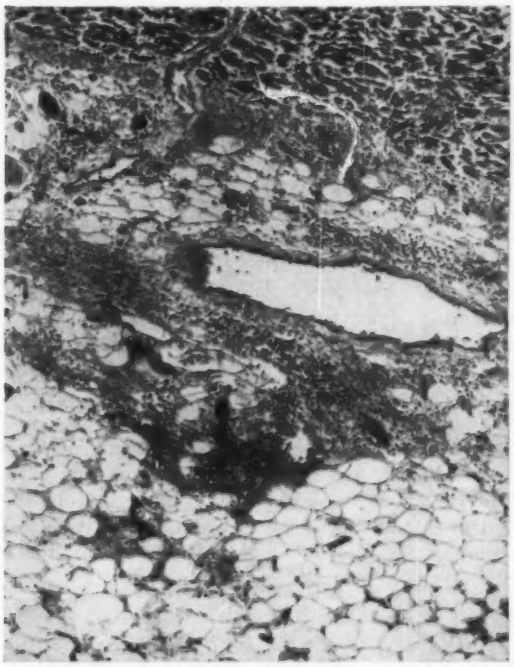


Fig. 7.—Section of subepicardial fat tissue showing infiltration by cells belonging to myeloid series.

Pathological Data

Dr. Paul B. Szanto: The body was that of a well-developed, somewhat emaciated woman. The pituitary was enlarged, as seen in multiparous women, due to increase in chromophobic and sparsely eosinophilic granulated cells of the anterior lobe. A moderately sized goiter (40 Gm.) was present. A mild peptic esophagitis was present which may have been responsible for the epigastric symptoms and signs. Corresponding with the history of "pus tubes,"

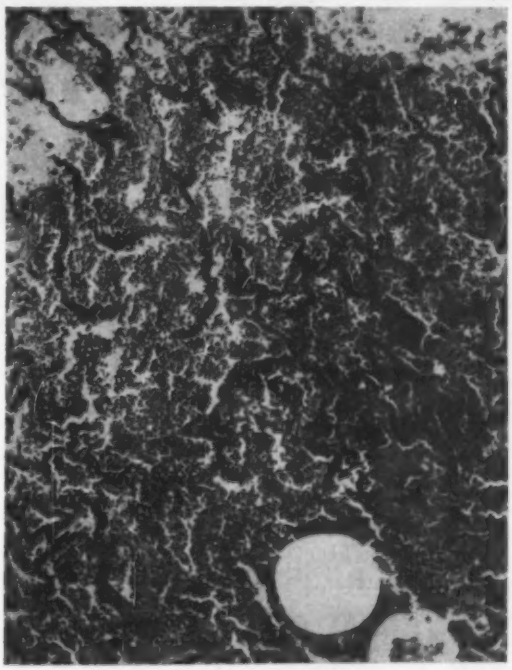


Fig. 8.—Section of lung; many cellular elements in alveoli are identified as myeloblasts and myelocytes.

there was a bilateral hydrosalpinx. A confluent bronchopneumonia involved the lower lobes of both lungs. All cardiac chambers were dilated (weight 350 Gm.). Subepicardial hemorrhages were noted. Microscopically, the myocardium and epicardium showed cellular infiltration. The central nervous system showed some degenerative changes in the granular cell layer of the cerebellum, as seen occasionally in chronic alcoholism. The left kidney was hypoplastic and showed changes of a chronic pyelonephritis. The right kidney showed compensatory hyperplasia. Chronic pyelonephritis is frequently superimposed on a hypoplastic kidney.

The liver was enlarged (1,950 Gm.), and, on section, the lobular architecture was not discernible. Microscopically, the portal fields were moderately enlarged and cellular. The sinusoids were extensively infiltrated by mononuclear cells (fig. 1). Megakaryocytes were also prominent. Many of the mononuclear cells were myeloblasts and myelocytes. The hepatic changes alone permit the diagnosis of a recent exacerbation of a chronic granulocytic leukemia.

The spleen was large and firm (1,800 Gm.). The splenic tissue presented a homogenous appearance, and the follicles were obscured. In acute leukemia, the size of the spleen is usually around 300 to 400 Gm. In erythremia, as this case was originally diagnosed, the weight of the spleen is usually between 300 and 500 Gm. The large size of this spleen would suggest either agnogenic myeloid metaplasia or chronic granulocytic leukemia. Histologically, the architecture was obliterated. The Malpighian corpuscles were absent. This is important, because the absence of the follicles rules out the possibility of agnogenic myeloid metaplasia. This diagnosis had to be considered because erythremia may occur in the early phase of agnogenic metaplasia. In this case, microscopically, the splenic tissue was replaced by cells of fairly uniform cell types (fig. 2), myeloblasts and myelocytes intermingled with megakaryocytes (fig. 3). All lymph nodes were moderately enlarged, discreet, and on cut section gray-white and bulging above the level of the capsule. Microscopically, the normal architecture was obscured due to infiltration or replacement of the normal lymphoid tissue by cells of the myeloid series.

The bone marrow was very cellular (fig. 4), including the fatty marrow, which was replaced chiefly by myeloblasts and myelocytes, with distinct scattered megakaryocytes. In some areas of the bone marrow, just as in the biopsy specimen, fibrous replacement was seen. In these areas, numerous argentophilic reticulum fibers and collagen fibers were seen (fig. 5). The diagnosis of focal myelofibrosis of the bone marrow is confirmed. Iron pigment was completely absent in the bone marrow, liver, spleen, and lymph nodes. Some of the other organs also showed myeloid infiltrations. The spinal ganglia were infiltrated by cells of the myeloid series. The colon showed superficial ulcers with infiltration of the submucosa by cells belonging to the myeloid series, especially myeloblasts and myelocytes.

Returning to the heart, the infiltration of the myocardium (fig. 6) and subepicardial fat tissue (fig. 7) consisted of myeloblasts and myelocytes; thus, a leukemic infiltration of the myocardium resulted in cardiac dilatation. A closer examination of the lung revealed that most of the cells in the alveoli were myeloblasts and myelocytes (fig. 8).

Pathological Diagnosis.—The pathological diagnosis was chronic granulocytic leukemia with recent exacerbation, leukemic infiltrations of lymph nodes, spleen, liver, colon, myocardium, and lung, and focal myelofibrosis of bone marrow; bilateral confluent bronchopneumonia, lower lobes; peptic esophagitis; chronic pyelonephritis of the left kidney, and compensatory hyperplasia of the right kidney.

Comment

Dr. Szanto: Myelofibrosis or "myelophthisic" states may occur secondary to (1) irradiation, (2) chronic benzol poisoning, (3) carcinomatous metastasis leading to a desmoplastic reaction, (4) aplastic anemia, and (5) unknown causes. Myelofibrosis of any cause may lead to myeloid metaplasia in the various organs, especially the spleen. The so-called agnogenic myeloid metaplasia (chronic nonleukemic myelosis)[1] is characterized by a progressive hepatosplenomegaly, with preservation of the Malpighian corpuscles, and it may or may not be associated with myelofibrosis. As mentioned above, in this case, the Malpighian corpuscles were absent, and the architecture of the spleen was completely obliterated. It should be pointed out that in our experience most of the cases diagnosed as agnogenic myeloid metaplasia are atypical forms of chronic granulocytic leukemia. In this case, none of the causes enumerated above were present to explain the myelofibrosis.

This 37-year-old woman developed clinical and hematological findings, interpreted six years prior to her death as erythremia. Although the possibility exists that polycythemic blood findings (erythrocytosis, but no true erythremia) may develop in the early phase of an agnogenic metaplasia, a review of the original symptoms makes the diagnosis of erythremia (polycythemia vera) acceptable. In the subsequent two years after the diagnosis of polycythemia vera was made, the patient received energetic treatment consisting of numerous phlebotomies and radiation. Later she developed moderate anemia, leukopenia, and a hypocellular bone marrow, findings which may reflect the myelofibrotic changes in the bone marrow. In the last months of her life, she developed an acute exacerbation of a chronic granulocytic leukemia.[2] We agree that the joint pains were manifestations of a secondary gout as occurs in leukemia. The marked orthopnea may be related to the extensive leukemic infiltration of the lungs. Myelofibrosis and myelosclerosis may develop in the course of leukemia. In leukemia, as well as in erythremia,[3] the leukemic process may lead to an increased activity of the fibroblasts and/or osteoblasts, or it may simulate the differentiation of the mesenchymal cells of the bone marrow into fibroblasts or osteoblasts.

References

1. Jackson, M., Jr.; Parker, F., Jr.; and Lemon, M. M.: Agnogenic Myeloid Metaplasia of Spleen, New England J. Med. **222:**985, 1940.

2. Schwartz, S. O., and Ehrlich, L.: Relationship of Polycythemia Vera to Leukemia: Critical Review, Acta haemat. **4:**129-147 (Sept.) 1950.

3. Wasserman, L. R.: Polycythemia Vera—Its Course and Treatment: Relation to Myeloid Metaplasia and Leukemia, Bull. New York Acad. Med. **30:**343-375 (May) 1954.

"All the comforts of home" is no cliché in a modern nursing home where couples may share their declining years in comfortable surroundings. Medical supervision and skilled nursing care play a key role here (see "Nobody Calls This an Institution," page 146.

MEDICINE AT WORK

- *Nursing Homes Roundup*
- *Secrets Not to Keep*
- *War on Staphylococcus*
- *Prescription Against Quackery*
- *'Village' for Oldsters*
- *Quotes from Minneapolis*
- *Where the Aged Don't Worry*

Sunrise and Sunset

Concern for infants matched concern for oldsters in the science-socioeconomics area which confronted the A. M. A. House of Delegates in Minneapolis last month. This is what the Committee on Maternal and Child Care announced as a goal:

The objective of perinatal mortality and morbidity studies is to improve the production of normal human beings. The elimination of deaths and damage during the process of reproduction is the ideal for which we should strive.

And this is from Governor Orville L. Freeman of Minnesota:

Can you help us to find a way to apply the voluntary health insurance principle to elderly and retired people? Can you help us to develop a program, that is within our means, to provide the kind of preventive care and attention that will make the sunset years healthier and happier? The people feel this need and when they feel it badly enough, they demand that it be met. The people then say, "there ought to be a law." Yet the best solution is seldom reached in an atmosphere of urgent need or bitter controversy.

On both of these challenges, the House took definitive action, adopting the Committee report as well as a far-seeing program for the aged.

For other selected quotes from the Clinical Meeting in Minneapolis Dec. 2 to 4, see page 150 of this section. A series of Medicine at Work reports and photos relating to facilities for the aged begins on this page.

What Is a Nursing Home?

Society Searches for an Answer as Facilities for the Aged Boom

"The term 'nursing home' has been used so indiscriminately that it has almost ceased to have any meaning." This statement, made a few years back by the director of an agency for the chronically ill, outlines the situation involving nursing homes today which is ambiguous: people talk a good deal about nursing homes, but often they are not talking about the same thing.

The Public Health Service, in a monograph called "Nursing Homes, Their Patients, and Their Care," underlines this national confusion. It states:

As a relatively new type of facility, the nursing home is not yet clearly conceived and understood. Like most newly emerging social institutions, it was not established full-blown and definitive; it has found its way gradually, hesitantly, and to a great extent, expediently. What it offers therefore is not necessarily always the professionally appropriate answers to the problems it attempts to meet, but rather responses dictated by immediate practicalities. It is not a homogenous type of institution; it means different things in different localities or to different people.

But lack of a proper definition has done little to dampen the growth of nursing homes in this country. Though their number was insignificant in the Thirties, a detailed survey made in 1953-'54 disclosed a national total of 25,000 establishments that qualified as nursing homes under the generous working definitions used in the PHS study.

Whatever their other variations, those homes surveyed by PHS were in agreement on one thing at least: they catered almost exclusively to the needs of the aged. Figures show the average age of the patients to be 80. Fewer than one-tenth of the residents of these homes are less than 65. As might be expected in this age grouping, women outnumber the men two to one.

Medical or Social Need?

Nursing homes are an outgrowth of our modern society with its highly complex social, medical, and economic structure. They have been created to fill a need that may be almost as much social as medical. Their func-

tion in the modern scheme appears to be poorly understood by the public.

These homes occupy a position in the medical care spectrum between the home for the aged and the chronic disease hospital, with overlaps at each end. Some have highly organized medical direction and offer housing almost as an adjunct. Many others are primarily shelters that operate without even the benefit of a trained practical nurse. They come in all sizes, too. While more than four-fifths of the 25,000 listed by PHS were proprietary, these accounted for less than half the total number of beds. The other half were in homes operated by voluntary organizations or governmental units.

Such a burgeoning area of medical care could not be long ignored by those interested in the health of the nation's oldsters. Attempts to develop standards for such homes are being or have been made by the American Medical Association, the American Hospital Association, the Public Health Service, and the American Nursing Home Association. Last November, the AHA announced it was prepared to inaugurate a program "to list inpatient care institutions other than hospitals as nursing homes." An attempt to correlate the resources of the principal purveyors of health care for the elderly has been undertaken by the Joint Council to Improve the Health Care of the Aged. Formed last year, the group's membership includes representatives of the A. M. A., ANHA, AHA, and the American Dental Association. They have labored tirelessly to bring about a solution to this broad and complex problem.

Definition by Function

Although their practices differ widely, nursing homes have been categorized by the Public Health Service in three classifications—one with two subdivisions:

Skilled Nursing Homes. Those capable of offering procedures, employed in caring for the sick, which require some technical nursing skill beyond that which the untrained person can administer.

Personal Care Homes. Those offering primarily such personal services as help in walking, getting in and out of bed, bathing, diet supervision, and aid with self-administered medications.

Sheltered Homes. Those offering room, board, custodial services, laundry, and minor personal services.

It soon became apparent that personal care homes were of two distinct types: those that offered personal care only, and those that had the personnel and equipment to offer skilled nursing services to a portion of the residents.

A current effort by the Public Health Service to identify various types of facilities by means of a numbering system came in for sharp discussion last month when the A. M. A. was host to officials of PHS, AHA, and ANHA at a meeting in Chicago. Purpose of the proposed numbered categorization would be to aid states' attempts at licensure.

In its current effort to study and develop data on nursing homes, the A. M. A.'s Committee on Medical and Related Facilities of the Council on Medical Service sent inspection teams to 35 geographically separated nursing homes last summer. Places chosen were considered to be among the nation's best.

For examples of two of the 35, see "Village for the Aged" on Page 149 and "Nobody Calls This an Institution" on Page 146

Preliminary reports of inspection teams indicated a variety of conditions in these homes. One stated: "There have been a few homes where the medical staff set-up, on paper, looked like the answer to a patient's prayer. Then you find that the medical director is in, perhaps, at the most once a week, and that the majority of medical supervision is handled by nurses."

Other inspections in the series pointed up a certain lack of agreement as to what constitutes proper social and rehabilitative programming in these homes. In some, the visitors found physical and

Yellow-Page Puzzle

The pages of a classified telephone directory in just one U.S. metropolis lists 149 establishments under the heading "Nursing Homes," yet the advertisements for these same homes indicate how their functions vary.

One, calling itself a convalescent home, offers "hospital care." Another, managed by a practical nurse, also caters to convalescents—and the elderly retired. Some advertise that they accept "mental cases," but they usually stress the adjective "mild." Others exclude "mental cases or alcoholics."

The nursing home classification also states: (see also Sanitariums). A look at the listings for sanitariums shows duplicate listings for many of the establishments also classified as nursing homes.

The phone book of another large city lists a similar array under the catch-all title of nursing homes, yet one of its offerings advertises itself as a "hotel for senior citizens—not a convalescent home." That place does, however, have "complete medical services available."

occupational therapy programs going full tilt with the approval of the residents. In others, such services were largely unused because the staff had been unable to interest the patients in participation. Indeed, in one home, the administrator questioned the value of occupational therapy as a morale builder, and avoided it as a matter of policy.

Is Money the Root?

Money—or, to be more accurate, its absence—often lies behind some of the more obvious faults of nursing homes. Dr. Willard Wright, chairman of the A. M. A. Committee on Medical and Related Facilities, says: "Increasing numbers of persons are dependent on various forms of governmental assistance. Frequently it is in this area that operators of nursing homes find themselves held down to such low income that they are unable to provide the best type of services."

This problem is greatest in those states where an indigent care program is not available. And yet, some homes—such as Mary Manning Walsh in New York, and Good Samaritan Village in Hastings, Neb. —operate successfully in spite of this handicap.

Medical care in the homes visited by the A. M. A. teams varied widely, yet staff men making the inspections found that the effectiveness of such care and supervision depended far more on the interest and effort of those taking part than on the plan itself. They found that many of the larger and newer homes had one or more full or part-time staff physicians who handled almost all the day-to-day medical care in the home, as well as responsibility for general medical policies. The other extreme was represented by small homes which had no staff physician, but engaged in various kinds of working relationships with local doctors, many of whom had their own patients in the home.

"In these latter cases," an interim A. M. A. report states, "one of the local physicians often acts as a confidant or advisor to the nursing home administrator on general medical problems. This type of arrangement is usually as informal as picking up a telephone, but depending on the attitude of the physician and administrator, has proved completely adequate for insuring good medical policies."

The physical plants of these homes vary almost as widely as do the administrative policies that guide them. Many of the smaller ones inhabit large homes dating back to an earlier era which offer stately surroundings often ill-suited to the needs they are expected to satisfy. With less than half their patients ambulatory, and a large proportion mentally disoriented at least part of the time, nursing homes have some important safety problems to consider and overcome. They are not always successful, as was violently illustrated a few years ago when 70 patients were incinerated in a Midwestern home as fire razed their quarters.

Other homes have been formed in more suitable, though unorthodox, facilities. Some have been constructed for the express purpose of housing a nursing home, but these appear to be the fortunate minority. More often they occupy quarters constructed for purposes now outdated: a school, a housing project, a former hospital.

Chairman of the A. M. A. Committee on Medical and Related Facilities of the Council on Medical Service is Dr. Willard Wright of Williston, N. D. Other members are Drs. William F. Costello of Dover, N. J.; Robert L. Novy of Detroit; David Henry Poer of Atlanta; W. C. Stover of Boonville, Ind.; Walter E. Vest of Huntington, W. Va.; and John M. Rumsey of San Diego, Calif. Dr. Edward C. Rosenow of Los Angeles is a consultant to the Committee. Staff Secretary is Mr. George W. Cooley.

Interest Quickening

Interest in the field of aging is on the upswing. Not only are nursing homes and similar facilities burgeoning, but public and professional concern with the problems of the elderly becomes more apparent daily. Within the past decade, giant strides have been made in this field. All states now have licensure laws covering nursing homes. The ANHA (grown to 4,500 members from a mere handful in 1954) works valiantly with other interested health groups to develop standards. In addition, the ANHA spends much of its time on educational programs for home operators.

The answer to all of this renewed interest is probably manifold: The obvious reason lies in the actuarial tables which show ever-increasing numbers reaching and surpassing the historic three-score-and-ten. A less obvious answer, but perhaps an even more pertinent one, was advanced last year by Dr. Cecil Wittson, a psychiatrist who is a member of the A. M. A. Committee on Aging. Speaking in Chicago before the A. M. A. Planning Conference on Aging, Dr. Wittson told the assembled physicians:

"Careful research over the past 2,000 years has finally established that senility has an incidence of 100 per cent among living populations. Geriattrition is the common fate of man. For once, the healthy future you are attempting to guarantee is not the other fellow's—it is your own."

Being dependent on a wheelchair doesn't mean inactivity for residents of the Mary Manning Walsh nursing home. Games and sports add interest and therapeutic opportunities to the home's daily schedule.

Nobody Calls This an Institution

Folks at Mary Manning Walsh Home Haven't Time to Worry About Old Age

There was concern, but no panic, when one of the aged male residents of the Mary Manning Walsh home on Manhattan's 59th Street failed to show up for lunch. Police were alerted and the Sisters scoured the neighborhood, but, even at dinner time, no trace could be found of the errant guest. It was late in the evening when he finally returned, tired but happy after a long day—spent at a Long Island race track.

In many nursing homes, the incident might have been the signal for a tightening of restrictions on the home's residents, but at Mary Manning Walsh, operated by the Carmelite Sisters, Mother Bernadette views such occurrences as a natural by-product of a policy that encourages all the activity, interests, and cosmopolitanism any resident finds himself capable of.

In a "constantly adapting" policy of administration, Mother Bernadette has come up with some happy solutions for some old problems:

For a retired milliner finding it difficult to adjust to the new life—a basement hat shop that serves the dual purpose of keeping her happily busy, and providing new bonnets for the home's feminine residents.

For those liking a nip or two but finding the local tavern too much of a good thing—the Emerald Room, a bar, complete with a red-jacketed, brass-buttoned bartender, that opens daily at 4 p. m. and serves cocktails for a "donation," a system which obviates the need for a liquor license.

For residents who want to feel they have a part in the operating decisions of the home—a resident council that weighs submitted ideas carefully, transmitting the best to a usually amenable administrator.

Hotel for the Elderly

Although Mary Manning Walsh home is an "institution" by definition, it has few of the undesirable attributes commonly associated with the term. A home for more than 300 persons, chiefly women, it occupies three interconnected buildings that formerly housed the New York Orthopedic Hospital. Operated on a nonprofit basis by the Roman Catholic Archdiocese of New York, the home offers several grades of care for the aged on a hotel-like basis. Open to all, regardless of race or religion, it is governed by a nine-man board that includes physicians, businessmen, lawyers, a Cardinal, and others. Couples, as well as individuals, are accepted. Female residents outnumber the males by about 5 to 1.

Medicine's role in the seven year history of Mary Manning Walsh home has been a constant one. Indeed, its medical problems were carefully considered by physicians before the home was opened. Dr. Howard Rusk, director of the Institute of Physical Medicine and Rehabilitation of New York University–Bellevue Medical Center, provided guidance in the early days and has continued his interest as a member of the home's board of directors. Dr. John F. Maloney, medical director for the home, supervises all medical care and matters of medical policy. Other staff physicians include Drs. Michael Dasco, Ann Maloney, and John Sokolow, who are retained on a part-time, paid basis. In addition, a number of the city's medical specialists act as consultants when needed.

The resident arrives at the home with a medical

If Mary Manning Walsh home had a formal slogan, it would probably be "The Residents Come First." Facilities and programs are in a constant state of flux as Mother Bernadette works to better her home's services. She says:

"We don't want to modify the living habits of the residents any more than is absolutely necessary. We try to make Mary Manning Walsh as much like the homes they came from as possible. If they've been used to a drink before dinner, a snack between meals, or smoking a pipe, we want them to continue to do so here. Our convenience is secondary to their happiness."

Vol. 169, No. 2

history and referral sheet filled out by his physician. Within 24 hours, he is given a physical examination by a member of the medical staff. Medical care during residence is based on the individual's condition, but the emphasis is on rehabilitative procedures for those suffering from illness or disability. Residents may have their own physicians, but staff doctors make a daily check on the condition of those needing skilled nursing care.

No Time for Self-Pity

The range of activities open to residents is extensive. In addition to the usual therapeutic arts and crafts, a resident may help plan and write a bimonthy newspaper, take photographs, act in or direct one of the many plays or shows, play the piano, sing with a choral group, take a course in music appreciation (or teach it), go for a boat ride around Manhattan, spend a few hours on a picnic, get a permanent or a haircut, entertain visitors in the snack bar, play games, or just read, chat, or meditate as the spirit moves.

Parties and special occasions are celebrated in constant succession at Mary Manning Walsh. Wedding anniversaries, birthdays, and legal and religious holidays all come in for special attention. In the summer, the buildings' balconies and roofs are used for exercise and entertainment, and, in cooler weather, the home's auditorium often is the scene for shows put on by visiting entertainers, many of them performers at one of the city's larger night clubs whose owner is interested in the home.

The majority of the home's residents are in their eighties. Most of them suffer from some handicap; many are bedfast or in wheelchairs. Yet some of them manage a surprising amount of activity:

—One woman won quite a TV following on a show featuring the aged.

—A male member of the home used his age to good advantage when he appeared as the model, complete with tattoo, in a national advertising campaign for a cigarette company.

—An architect, living in the home with his wife, still works as a consultant in his profession.

Beds and Wheelchairs, Too

While the more active residents provide for their own interests, the less fortunate are not forgotten. Bedfast patients, in addition to expert nursing care, are given small attentions too. A supply of pretty gowns and bedjackets are liberally used, and shampoos and hair grooming are offered as needed. For those confined to wheelchairs, a variety of therapeutic activities is maintained, even such unlikely ones as bowling and badminton.

Some of the home's residents are dependent on public assistance; others are provided for through their own resources or those of relatives. The administrator says the home is self-sustaining, partly due to the fact that many of the staff are members of the religious order. Groups of nursing aides are assigned to the home for two-month training periods.

Mary Manning Walsh home gives every appearance of being almost an unqualified success—and appearances, in this case, are not deceiving if you listen to one of the home's first residents. A retired physician, Dr. Francis A. Schneider, on the occasion of the home's fifth anniversary, wrote:

"Five years and three months have rushed by . . . never wondering what to do with ourselves, never lonesome, but always occupied wishing the day would take on additional hours. My roommate (alias wife) has so many interests that I fear our relationship might be reduced before long to a mere bowing acquaintance from a distance. As for myself, I have widened my horizon in knowledge, hobbies and experience to such an extent that an enumeration of them before our entrance [to the home] would have sounded ludicrous."

No Miracle on 59th Street—
Just a happy home amid tenements

Routine Medical—
One of many check-ups

On this and the preceding page are scenes from the Mary Manning Walsh home on 59th street in Manhattan. While medical care is a key factor in this nursing home that "nobody calls an institution," a myriad of other important aspects are called into play—a millinery shop, a bar, bowling, arts and crafts.

Easy Does It—
Rehabilitation in action

How Perky—
The millinery shop

Keeping Busy—
Everybody works at something

An Aperitif—
The bartender lives here, too

Vol. 169, No. 2

'Village' for the Aged

Nebraska Unit Emphasizes Medical Care at Every Level of Need

People never grew old in Sir James M. Barrie's "land of never-never," and it might be argued that this has practical as well as theoretical advantages. For one thing, its citizens did not need to worry about such matters as pensions and social security.

But in Nebraska—just as in the rest of the world—aging has its problems, and it is here that a "village" devoted to the needs of the elderly is growing. Opened to residents only eight months ago, it had nearly 200 admissions last year.

Good Samaritan Village is geared to the requirements of the aged whether they may be retired couples able to care for themselves or bedridden patients without home or family. Sponsored and originally financed by the Good Samaritan Society, a Lutheran church-related group which operates 60 nursing and old age homes, the Village was founded in a wartime housing development known as Spencer Park, an outlying section of Hastings. Although a community unit in its own right, the "village" has no civic government of its own.

It was established in 1957 with the purchase of about half of the project's 850 apartments. An option was taken on the other half, and the Society is currently awaiting a decision on its application for a $425,000 FHA-insured loan. Streets and sidewalks are paved, and all apartments are equipped with gas radiant heating units and water heaters.

Rev. William Goldbeck, an ordained Lutheran minister, became administrator of the 80-acre Village after serving as chaplain at the nearby Hastings State Hospital. He is aided by an advisory committee made up of the business and professional leaders of Hastings. Other volunteer groups help out with recreational ventures.

Plan for Medical Care

A local physician interested in geriatrics, Dr. Gerald Kuehn, acts as medical director of the rest home and infirmary. Recommended by the Adams County Medical Society, he supervises the over-all medical program, acts as physician to those who have none, and is available in emergencies. Many residents make their own arrangements with private physicians, as do some of the infirmary patients.

Hospital care is available to Good Samaritan Village residents at the 138-bed general hospital in Hastings, a short drive away. Laboratory work is currently done through outside facilities, but an enlarged infirmary now in the planning stage will include a laboratory as well as facilities for oxygen, basal metabolism rate equipment, electrocardiogram, x-ray, and sterilization.

The Village is designed to operate on a non-profit, self-sustaining basis offering "security, Christian care, and companionship" for those of normal retiring age or who for other reasons must limit their activities. Five levels of care are available:

—One to three-bedroom apartments for couples or individuals who are capable of caring for themselves, and who seek only the companionship of others of their age group.

—Similar apartments for those who can maintain their own households with assistance from a "house visitor" who will come each day to help with household duties and meal planning.

—The same living arrangements as above, but with provision for one or more meals in a central dining room.

—A rest home providing personal care under medical supervision for those who need help with feeding, dressing, walking, and similar activities.

—An infirmary section of the rest home for those in need of nursing care and medical supervision.

Apartments consist of a kitchen, living room, and from one to three bedrooms each. Monthly rental is $25, $30, or $35—depending on the number of bedrooms. Cost of gas and electricity is extra. For those found to require it, the "house visitor" will drop in at no extra charge. There is an extra cost for meals eaten in the central dining room.

Care in the rest home includes meals, laundry, and room service. For the patient up and about, the cost is $85 to $95 a month. Cost for the person in a wheelchair or walker is $100 to $125. Bed care in the infirmary is available for $125 to $150 a month. An expected innovation will be suites for couples in the rest home, each with a private bath.

Population Possibilities

First occupants of the Village moved in last summer. At last report, only a handful of the apartments had been rented, but the existing infirmary was filled to its capacity of 11 patients. Additional construction underway will increase capacity to 52 this spring. The rest home is also in its infancy but will be able to accept 92 residents on completion. Eventual population of the Village may reach 800 or more, if all available housing is used. Residents furnish their own apartments—a point which, it is hoped, will help to make them feel at home.

Plans for the future at Good Samaritan Village are hopefully farsighted. Additions to the physical plant will include a shopping center, chapel, recreation center, park, greenhouse, library, and hobby shop. Due for increasing emphasis are social services and rehabilitation programs.

While the land of Peter Pan has not lost its appeal to our imaginations, it is well to view aging in a more pragmatic light. Answers to the problem of caring for the elderly are eagerly sought today, and Good Samaritan Village is convinced it has one of the better solutions.

They Said It at Minneapolis . . .

Some significant comments reported "on the record" at the 12th Clinical Meeting last month:

Unfortunately, many people who habitually advocate government solutions to health problems do so on the basis of political expediency. Some of them, including well-intentioned physicians, support such programs because of the motives and objectives involved, but they choose to ignore or minimize the great dangers inherent in the means. As a result the medical profession frequently is forced into opposing legislation which has a worthy goal, but which offers numerous pitfalls for both medicine and the public.

We should make our views known—in community affairs, on national issues, on any and all questions of the day. There is a direct relationship between the future of individualism and the ultimate fate of the medical profession.

In our relations with third parties we cannot deny the validity of criticism. We should welcome it, study it and learn from it. . . .We also should appraise some of our own programs—among them, the effectiveness of our policing of that minority of physicians whose actions bring discredit and trouble to all of us. . . .A critic of the schools is no more automatically an enemy of education than a music credit is an enemy of music. By the same token, a sincere critic of bad medicine can be the best kind of friend for good medicine.

—Dr. Gunnar Gundersen, President of the A.M.A.

In recent years medicine may have suffered more from its successes than from its failures. Progress in postponing death has come so rapidly in the past several decades that we must now recognize that the rate of progress can scarcely be continued at its frenzied pace.

—Committee to Study A.M.A. Objectives and Basic Programs.

Not only are the ladies [of the Woman's Auxiliary] a charming, indispensable, stimulating part of our everyday lives, aiding most in preventing us from regarding our professional work as a chore, but they also play a very vital part in Medicine in our country.

—Report adopted by House of Delegates.

There are approximately 1,500 companies in the health insurance field, and the character of the industry is such that the whole industry tends to follow, with comparable plans, once a few enter into a new phase of underwriting. Since some of the major companies are already active in provision of (1) coverage for an individual or for group enrollment for individuals over 65 and their families, and (2) "Paid-up" coverage at retirement, a rapid growth in such types of contracts may be expected in the future.

—Adopted report of Council on Medical Service.

It seems reasonable to assume that underwriting organizations, as well as health and welfare fund administrators, individuals and physicians need to understand the relative values of physicians' services if health insurance and similar mechanisms are to succeed and fulfill their potential in financing, either in full or in part, the cost incident to medical care.

—Committee on Medical Practices.

Of the 15 bills of a medical nature enacted into law by the 85th Congress, only one was opposed by the A.M.A. . . . In its statements to Congress the Association was supporting the legislation or principle involved on 19 occasions and was in opposition on only six occasions. We believe that these facts should be publicized to the American public and to the medical profession in order to help eliminate the oft-heard charge that the Association is basically negative in its approach to legislative matters.

—Report adopted by House of Delegates.

Whatever progress is to be achieved in the future cannot be made by unilateral action—whether by the medical profession or "third parties" in matters which intimately concern both groups. Problems and issues which have disturbed relationships in the past must be resolved on the basis of a mutual acceptance of responsibility, an understanding of the professional relationships and patient care involved, and other social and economic factors.

—Council on Medical Service.

A.M.A.'s House of Delegates, like the Congress, carries on its business openly. Our proceedings are of interest to both the profession and the public. Under these circumstances the failure to disseminate information regarding an important policy matter only stimulates rumor and misrepresentation. In the long run it is to our advantage, as well as the public and the profession, to make available factual, judiciously selected, information on matters under consideration as well as on those on which definitive action already has been taken.

—Adopted report of Board of Trustees.

War on Staphylococcus—Via New Training Aids Program

Spurred by the appearance of antibiotic-resistant Staphylococcus pyogenes var. aureus, a multiagency committee is bolstering the national program aimed at control of this bacterium in hospitals.

Known as the Interagency Committee for Training Aids on Staphylococcal Disease, the group was created through the efforts of six major health organizations: American Academy of Pediatrics, American College of Surgeons, American Hospital Association, American Medical Association, American Nurses Association, and the Communicable Disease Center of the U. S. Department of Health, Education, and Welfare.

An exchange of information on audiovisual and other training materials will be the aim of the new group. Mr. Ralph P. Creer, Director of Medical Motion Pictures and Television for the A. M. A., is chairman. The committee plans an immediate review of all existing training aids and will coordinate production, distribution, and utilization of future audiovisual materials.

The committee also hopes to avoid duplication of training aids and to encourage presentations that will best orient both professional and subprofessional groups to the increasing challenge posed by the Staphylococcus problem.

Vol. 169, No. 2 135/151

Prescription Against Quackery Written by A.M.A. Bureau

The letter came to the A. M. A. Bureau of Investigation from a physician faced with a dilemma as old as quackery itself:

I have a young child as my patient. She has carcinoma of inoperable type. Relatives are trying to persuade the father to send her to Dallas for the Hoxsey treatment. My arguments against this would carry more weight if you could supply me with material regarding this treatment. Please send whatever information you have available.

The Bureau, in its report to the House of Delegates last month, noted that in the past year it had answered 3,200 similar inquiries. Some are from physicians; many more are from students, government agencies, Better Business Bureaus, and just plain hopeful, but slightly suspicious, laymen.

The Bureau's half-million index cards, carefully catalogued, provide a running history of modern charlatanry, a monument to man's gullibility in medical matters. But man need not be ignorant of the facts on "new" nostrums, machines, or treatments purported to relieve all the ills of mankind. The accumulated knowledge of the Bureau is available to both physicians and the public for the cost of a 4-cent stamp.

What sort of questions do they have, these correspondents? They vary from queries on the therapeutic qualities of garlic pills to the efficacy of vibrating mattresses as reducing aids, from hair growers to bust developers. There are trends, however, usually tied closely to diseases that have been heavily publicized.

Foremost among these for the past several years has been cancer, although the tempo has been falling off. Cancer questions reached a peak of more than 1,000 in 1955, but since then an increasing campaign in public education, effective enforcement of the Food and Drug Act, the death of two cancer quacks, and the closing of a Missouri "institute" have slowed the stream.

Other popular subjects of late have been alleged "rejuvenators" (especially Royal Jelly), vitamin preparations, reducing aids, and the many gadgets of the ingenious quack.

The Bureau—headed by Mr. Oliver Field, an attorney with a background of investigative experience—cooperates closely with law enforcement agencies, offering information on request and adding data from these agencies to Bureau files where applicable. The federal Food and Drug Administration, the Post Office Department, and the Federal Trade Commission are no strangers to Field. Often the Bureau's files have been helpful to them as source material for their investigations.

In addition to answering mailed queries, Field makes an average of 50 talks a year before medical societies, civic clubs, PTA's, service organizations, and university groups. Field agrees only partially with Voltaire's opinion that "the charlatan was born when the first knave met the first fool." He believes that it is not the foolish but the ignorant or misinformed who are the ready victims of quackery.

Secrets Which Doctors Should Not Keep

More than one petty thief has hit the big time at a doctor's expense—and there is some evidence that the apathy of the victim may be giving such a criminal a push up the ladder of "success." The following selected recent newspaper accounts indicate a rising trend of stealing from physicians:

—Late last summer, the Associated Press reported the case of Joseph Richard Gerard, who took $9,500 in cash and $12,420 in checks and securities from a safe in the home of a physician "friend" in New Athens, Ill. Gerard spent three months traveling and gambling in an attempt to get money to repay the doctor. Conscience-stricken, he finally gave himself up in San Antonio. According to the news report, "Mystified local authorities said the doctor had not reported the theft to them."

—Other thieves thrived on their victim's hesitancy to discuss his affairs last year, when $245,000 in stocks were stolen from a Lancaster, Pa., retired physician. According to the *New York Times*, 82-year-old Dr. Donald M. Myers returned from town one night to find three men waiting for him. They escorted him inside his home, tied him up, and broke open his desk. There they found 22,313 shares of stock. Dr. Myers freed himself after the robbers left, but it was not until 10 days later that he told a friend—and swore him to secrecy.

"It might have remained a general secret," the *Times* reported. But two months later a man assumed the identity of the aged doctor and tried to sell the securities to a brokerage firm, which became suspicious and found out they had been stolen.

—According to the *A.M.A. News*, two "patients," working separately, made a healthy profit on the principle that doctors also have neither the time nor the inclination to check up on bank accounts.

The A.M.A. Bureau of Investigation is working with police by alerting the profession to operations of such bogus check passers and other swindlers. Oliver Field, director of the Bureau, says:

"Swindlers and thieves are free to steal again whenever their victims keep silent. Physicians, particularly, have a duty to protect fellow practitioners, as well as all fellow citizens, by reporting such crimes immediately to police."

THE JOURNAL
OF THE AMERICAN MEDICAL ASSOCIATION

Editor . . . . . JOHNSON F. HAMMOND, M.D.
Assistant Editors . . . . . WAYNE G. BRANDSTADT, M.D.
FREDERIC T. JUNG, M.D.
Assistant to the Editor . . . . . MILTON GOLIN
Editor for Medical Literature Abstracts . GEORGE HALPERIN, M.D.
News Editor . . . . . CHARLES CHAPMAN

Subscription price . Fifteen dollars per annum in advance
Cable Address . . . . . "Medic, Chicago"

SMALLPOX TODAY

VIVID impressions have been recorded by Prof. A. Herrlich of a severe smallpox epidemic that began in East Pakistan and came to involve India. Herrlich was permitted by the Public Health Service in Bombay to spend four weeks at the City Fever Hospital, where he was able to examine more than 500 smallpox patients. He returned to Germany with much valuable material, including continuously refrigerated specimens of blood and tissues. The rapid progress of virology in recent years and the reports of new methods for cultivating the smallpox virus enhance the value of such material.[1] In addition, Herrlich has published photographs that strikingly illustrate the course of smallpox in its severe forms.[2] These should be of special interest to physicians in countries like the United States, where "classical" smallpox is absent and the diagnosis of cases made mild by vaccination has become difficult.[3]

The cases seen by Herrlich were of the worst kind. He saw more than one patient whose head seemed to be covered by a single confluent lesion, with mouth and nose so obstructed by swollen tissues and purulent discharges that the drinking of water became impossible, tracheotomy was out of the question, and asphyxia could only be postponed by giving oxygen through a nasal catheter. He saw patients lying practically immobilized in an armor of crusts that covered pus, blood, and indurated tissue. In one patient who recovered, the process of desquamation included the shedding of the soles of both feet.

At the height of the outbreak in Bombay there were 450 smallpox patients at this hospital, many of them sheltered in large emergency tents and cared for partly by relatives and friends. The picture is worth keeping in mind, for the adequacy of our medical, nursing, and hospital facilities in the face of possible epidemics of this magnitude needs to be reviewed from time to time. Herrlich pays tribute to the untiring efforts of the young Indian physicians and nurses, overwhelmed as they were by this encounter with a disease for which there is still no direct remedy. There was also a shortage of antibiotics. They do not prevent the multiplication of the smallpox virus but they are important in controlling secondary infections. The incidence of such infections—abscesses, secondary pneumonia, orchitis, osteomyelitis, and others—was alarmingly high. It might well have been reduced had it been possible to use antibiotics on a larger scale.

Smallpox is still endemic in some parts of the world and is still being carried about by international travelers. The World Health Organization has reported [4] that no less than 18 countries were thus infected with smallpox in the year 1956. The disease was successfully localized in 10 countries, but epidemics started in 8. In 1956 WHO stated [5] that "for the past 5 years 58% of all cases were reported from India and Pakistan." It was further stated that "The Indian sub-continent (India and Pakistan) is at present the principal endemic reservoir of variola major, with high mortality. Vaccination and previous attacks have not yet built up a sufficient proportion of protected population." [6] In 1958 WHO reported, further, that the incidence of smallpox in India was rising.[7] It appears that these were the signs presaging the "smallpox year" that Herrlich witnessed.

People who have never seen smallpox may find it hard to maintain that feeling of conviction that is needed to run a continuous program of vaccination. On this point Herrlich, who is director of the Bavarian State Vaccination Institute writes with emphasis: "The only way to combat smallpox is to vaccinate, and the only way to avoid the complications of vaccination would be not to vaccinate. But in all our discussions of the advantages and disadvantages of vaccination we should not belittle the importance of smallpox as a disease . . . It continues to defy the exertions of physicians and remains as treacherous as it was in the days of the Arabs who first described it."

1. Cultivation of Smallpox Virus, Foreign Letters, J. A. M. A. **163**: 762 (March 2) 1957.
2. Herrlich, A.: Variola, Deutsche med. Wchnschr. **83**: 1426-1428, 1436, and 1441 (Aug. 22) 1958.
3. Americas, in Gear, H. S.: Disease Control and International Travel: Review of International Sanitary Regulations, Chron. World Health Organ. **10**: 300 (Sept.-Oct.) 1956.
4. Smallpox Spread by International Travelers, Medical News, J. A. M. A. **165**: 1720 (Nov. 30) 1957.
5. International Sanitary Regulations, Foreign Letters, J. A. M. A. **163**: 770 (March 2) 1957.
6. Asia, in Gear, H. S.: Disease Control and International Travel: Review of International Sanitary Regulations, Chron. World Health Organ. **10**: 299 (Sept.-Oct.) 1956.
7. Smallpox and Cholera, Foreign Letters, J. A. M. A. **167**: 1768 (Aug. 2) 1958.

COUNCIL ON MEDICAL SERVICE

HOW OLD IS TOO OLD TO WORK?

Interesting clues, with specific application to retirement, as to the answer to the question, "How old is too old to work?" have been reported by S. L. Pressey, professor of psychology at Ohio State University, under the title of "Jobs at 80."[1] Although this study pertained more to persons now living, some surprising examples of performance during the latter decades of life were taken from eras when the average life expectancy was far below the approximately 70 years prevailing today. The studies of Lehman[2] are cited in the following examples: Gladstone was prime minister at 84; a number of our Supreme Court justices served well into their eighth decades (Holmes was 90 when he retired); Tennyson was 80 when he wrote "Crossing the Bar"; Belline at 83 painted one of his masterpieces; Robert Bridges and Thomas Hardy at 85 published poetry that has been long remembered; Verdi was composing at 85; Alexander Humboldt at 89 published his "Cosmology"; and Wundt completed his reminiscences at the age of 88.

Lehman lists 94 persons who continued to produce well into their later decades, 29 of whom produced works of importance at the ages of 80 or over. Pressey points out that, while Lehman's data clearly indicate that the best creative work in the arts and science is usually accomplished quite early in life, his research gives abundant evidence that the creative mind may continue to be productive well into the later years of the life span.

Of more current interest—how about those living and working today into their eighth decades, and further, those engaged in more ordinary areas of activities.[3] Pressey, instead of employing a systematic sampling procedure, merely made an effort to find out if there were such cases of octogenarians, and, if so, of what types. Three sources were explored for case material.[3] 1. Extensive case records of 230 superior older persons in a midwest city. Result: 35 were 80 years of age or over and, of these, 19 were at least occasionally doing some remunerative work. 2. Reports from a total of over 1,000 university students concerned with such problems; these students were requested to report their knowledge of well-known older persons who had done paid work. Result: A total of 127 persons were reported, all of whom were 80 years of age or over and, of these, 9 were 90 or over. 3. A collection of clippings regarding older persons; only those clippings were used which seemed essentially valid. Result: 167 persons past the age of 80 were reported as doing some work.

The three sources which were utilized produced 313 persons aged 80 or over (23 were 90) who were still earning money—who were gainfully employed. Most of the nonagenarians were working either part time or occasionally and included two clergymen, three physicians, three lawyers, one 94-year-old woman who was a receptionist, one man who was justice of the peace, another who operated a cigar stand part time, and one who trained dogs for driving livestock. However, a few were still employed full time; two were bank presidents in small towns; one was a bank teller; and a woman aged 90 was continuing her insurance business.

Among others, all over 80 years of age, but not necessarily 90, were three persons who wrote columns for their local papers, a wood carver who was retouching and restoring paintings and church frescoes, a chemist who was consultant for an industrial organization, a biologist who was consultant for a research institute, and another who published a history of his specialty.

Professional people constituted the largest group (18 physicians and 12 lawyers) but there were 24 skilled artisans, 8 farmers, 8 owners of small stores, 3 clerks, 2 barbers, and several handy men.

Pressey points out that, in view of the informal method of the survey, the figures mean nothing except to show that in all work categories some persons continue useful work into the eighth and ninth decades.

To the above figures probably should be added an undetermined number of persons who had the capacity to work but lacked either the desire or the necessity, and those who had these characteristics but for whom no work was available.

References

1. Pressey, S. L.: Jobs at 80, Geriatrics **13**:678-681 (Oct.) 1958.

2. Lehman, H. C.: Age and Achievement, Princeton, N. J., Princeton University Press, 1953.

3. Pressey, S. L.: Potentials of Age: Exploratory Field Study, Genetic Psych. Monograms **56**:159-205 (Aug.) 1957.

MEDICAL NEWS

CALIFORNIA

Heart Symposium in Los Angeles.—Twenty local investigators will present papers on cardiovascular diseases at the third annual Midwinter Symposium of the Los Angeles County Heart Association at the Statler Hotel Jan. 14. The symposium is free to all physicians. Dr. John L. Denney is chairman of the all-day session, which will begin at 9 a. m. and will feature studies in basic sciences, clinical research, and heart surgery. The annual Oliver P. Douglas Memorial prize essay award and honorable mention award will be presented at a luncheon meeting by Dr. Edward Shapiro, past-president of the association.

COLORADO

Combined Meeting in Colorado Springs.—The American College of Physicians, Colorado Region, and the Colorado Society of Internal Medicine will hold a combined meeting at the Broadmoor Hotel, Colorado Springs, Jan. 16-17. Guest speakers include Dr. Philip S. Hench, Rochester, Minn., regent of the college and Dr. H. Marvin Pollard, Ann Arbor, Mich., governor of the college for Michigan. Dr. C. F. Kemper is governor of the college for Colorado, and Dr. William A. H. Rettberg is President of the Colorado Society of Internal Medicine. Three panel discussions are planned with the following moderators:

The Prevention and Management of Hepatitis, Dr. Fred Kern Jr., Denver.

Recent Developments in Rheumatic Diseases, Dr. Charley J. Smyth, Denver.

Anxiety in Clinical Medicine, Dr. Franklin G. Ebaugh, Denver.

For information write Mr. E. R. Loveland, 4200 Pine St., Philadelphia 4.

FLORIDA

Dr. Eyster Honored.—Dr. John A. E. Eyster, of Fort Meyers, emeritus professor of physiology who retired from the University of Wisconsin Medical School, Madison, in 1952, has been honored for "incisive, productive, and humane experimental science" by the Medical Research Association of California which awarded Dr. Eyster its Senior Scientist Award for 1958. In reviewing his research career, the association cited Dr. Eyster for "inspired graduate and medical teaching, and for devotion to the advancement of medicine through animal research."

Physicians are invited to send to this department items of news of general interest, for example, those relating to society activities, new hospitals, education, and public health. Programs should be received at least three weeks before the date of meeting.

ILLINOIS

Chicago

Dr. Hesseltine Named Ryerson Professor.—Dr. Henry C. Hesseltine, professor and secretary, department of obstetrics and gynecology, University of Chicago, has been named Mary Campau Ryerson Professor of Obstetrics and Gynecology. Mary Campau Ryerson was the mother of the late Martin A. Ryerson, member of the Board of Trustees of the University from 1890 to 1931 and president from 1892 to 1922 who died in 1932 and who established the Mary Campau Ryerson professorship Dec. 11, 1930, as a tribute to his mother. Dr. Hesseltine became an instructor in obstetrics and gynecology at the University of Chicago in 1931, assistant professor in 1934, associate professor in 1942, secretary of the department and professor in 1949. His appointment to the named chair became effective Nov. 11. He is president of the Chicago Gynecological Society and a diplomate of the American Board of Obstetrics and Gynecology.

LOUISIANA

Graduate Medical Assembly.—The 22nd annual meeting of The New Orleans Graduate Medical Assembly will be held March 2-5, with headquarters at the Roosevelt Hotel. Eighteen guest speakers will participate, and presentations are planned to be of interest to specialists and general practitioners. The program will include 54 discussions in addition to clinicopathologic conferences, symposiums, medical motion pictures, round-table luncheons, and technical exhibits. Following the meeting, arrangements have been made for a clinical tour to Mexico City, Cuernavaca, Taxco, Acapulco, and San Jose Purua, leaving New Orleans March 6 and returning March 21. Information is available at the office of the Assembly, Room 103, 1430 Tulane Ave., New Orleans 12.

MARYLAND

Dr. Lillie Receives Award.—The first Sustaining Membership award of the Association of Military Surgeons of the United States was given to Dr. Ralph D. Lillie, chief of laboratory and histochemistry, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, "for his accomplishments in the field of histochem-

istry" at the recent meeting of the association. This award, consisting of a scroll and an honorarium of $500, is given by the Sustaining Membership Group of the association to government employees who have distinguished themselves by "outstanding work in the field of research."

MASSACHUSETTS

Lectures on Medicine and Law.—The Right Honorable Lord Nathan, P. C., of England, spoke on "Medical Negligence and the Law" at Boston University School of Medicine, Nov. 18. Lord Nathan was the first speaker in a series of lectures sponsored by the Boston University Law-Medicine Research Institute. Director of the Institute is Prof. William J. Curran of Waban, Mass. Lord Nathan is a member of the International Law Association, Medico-Legal Society, and the British Section, International Commission of Jurists (Member of Council). Future speakers in the series sponsored by the institute will talk on Law and Behavioral Science; Heart Disease and Stress; Demonstrative Medical Evidence; Medicine, Morals and The Law; and Accidents and Accident Repeaters.

MICHIGAN

Establish Gordon B. Myers Award.—The Gordon B. Myers award in internal medicine has been established at Wayne State University College of Medicine, Detroit, "in recognition of Dr. Myers' inspiring leadership as chairman of the department of medicine for over 20 years." The award has been made possible by contributions from former residents and fellows who received postgraduate training under Dr. Myers. An award of $100 and a scroll is to be made annually to the graduating senior who has distinguished himself above all others in his class in courses given by the department of medicine. The recipient of the award will be chosen by the chairman and the full-time faculty of the department. Dr. Myers resigned as chairman of the department of medicine in 1958. As professor of medicine, he heads the university service in internal medicine at Harper Hospital.

MINNESOTA

Guest Lecture.—Mr. R. Milnes Walker, professor of surgery in the University of Bristol, Bristol, England, gave a lecture on "Some Problems of Portal Hypertension" at the Mayo Clinic and Mayo Foundation, Rochester, Nov. 7.

NEW JERSEY

Typhoid Fever.—The National Office of Vital Statistics has revealed that Dr. Hugh D. Palmer, New Jersey district state health officer, reported an outbreak of six cases of typhoid fever in a community of about 1,000 population. On Oct. 24 a 42-year-old woman died with a tentative diagnosis of typhoid fever. This diagnosis was subsequently confirmed. By Nov. 8 other cases had developed in five persons ranging in age from 2 to 16 years. The diagnoses were confirmed by isolation of *Salmonella typhi* from stool specimens and/or agglutination titers. Blood specimens were positive for "O" and "H" antigens. The community is without public water and sewerage facilities. The houses in which the illnesses occurred have cesspools and shallow wells.

NEW YORK

Dr. Hodge Named Department Chairman.—Appointed as professor of pharmacology and chairman of the new department of pharmacology, University of Rochester School of Medicine and Dentistry, is Harold C. Hodge, Ph.D., who has been a professor of pharmacology and toxicology at the Atomic Energy Project of the medical center since 1946.

Society News.—The Medical Society of the State of New York, 750 Third Ave., New York 17, has announced the appointment of Dr. Herbert T. Wagner as executive director.—The officers of the New York Allergy Society for 1958-1959 are as follows: president, Dr. Aaron D. Spielman, New York City; president-elect, Dr. S. Senior Sack, Flushing; vice-president, Dr. Russell C. Grove, New York City; secretary, Dr. Sheppard Siegal, New York City; treasurer, Dr. Joseph H. Fries, Brooklyn; and assistant secretary-treasurer, Dr. Murray Dworetzky, New York City.

New York City

Memorial Fellowship in Dermatology.—Phi Delta Epsilon Fraternity's Charles R. Rein Memorial Fund has awarded a fellowship in dermatology to New York University. It honors the late Dr. Charles R. Rein of the department of dermatology and syphilology of the NYU Post-Graduate Medical School and is to go annually to the candidate selected by Dean Donal Sheehan and the chairman of the department of dermatology and syphilology. Dr. Laszlo Biro, a resident in the dermatologic service at The Bellevue Hospital Center, has been selected to be the first recipient of the fellowship. He will engage in research on the serology, immunology, and epidemiology of treponemal and staphylococcal diseases and other infections. The three-year fellowship, made possible through the contributions of fraternity members and friends to a memorial fund, was established in May, 1957, on the death of Dr. Rein, a past-grand consul of the fraternity.

Personal.—Dr. H. Houston Merritt, acting dean of the Faculty of Medicine and acting vice-president in charge of medical affairs at Columbia Univer-

sity College of Physicians and Surgeons, has been elected a vice-president of United Cerebral Palsy Associations Inc., at the organization's ninth annual conference.—Dr. Abraham M. Rabiner has been named professor emeritus of neurology at the State University of New York Downstate Medical Center in Brooklyn. A member of the center's faculty since 1937 when it was still the Long Island College of Medicine, Dr. Rabiner retired as professor and head of the division of neurology on Aug. 31. On the same date he retired as director of neurology at the Kings County Hospital.—Dr. Frederick S. Reiss, associate clinical professor of dermatology, New York University, Postgraduate Medical School, has been elected honorary member of the Sociedade Portuguesa de Dermatologia e Venereologia.

NORTH CAROLINA

Program to Aid Child Amputees.—The Duke University Medical Center's Orthopedic-Amputee Clinic has been selected to participate in a national program aimed at helping child amputees. Sponsored by the Prosthetic Research Board of New York University under the National Research Council, the program will help parallel for children the progress made in artificial limbs for veterans since World War II. Also, the program will promote the expansion of child amputee clinics throughout the United States. The Duke amputee clinic, headed by Dr. J. Leonard Goldner, professor of orthopedic surgery, is one of nine chosen to take part in the program. Beginning Jan. 1, the Duke clinic will collect special data on the problems and progress of all amputee patients under 16 years of age. This and similar information gathered at other amputee clinics over the nation will be brought together during periodic meetings of clinic heads. Other amputee clinics participating with Duke in the new program are located in Atlanta, Ga.; Birmingham, Ala.; Philadelphia; Grand Rapids, Mich.; Buffalo, N. Y.; Los Angeles; Chicago; and New York City. The Duke clinic, established in 1955, uses a team approach to the problems of amputees. Team members include an orthopedic surgeon, a prosthetist (artificial limb maker), a physical therapist, an occupational therapist, and a social service worker.

OHIO

Dr. Beck Gives Kuntz Lecture.—Dr. Claude S. Beck, professor of cardiovascular surgery, Western Reserve University School of Medicine, Cleveland, delivered the annual Albert Kuntz lecture Dec. 15 on "Coronary Heart Disease Blood Supply to Ischemic Muscle." The lecture is sponsored by the Phi Chi Medical Fraternity of the Saint Louis University School of Medicine.

Physicians Meeting in Cincinnati.—The Ohio Regional meeting of the American College of Physicians will be held at the Netherland Hilton Hotel, Cincinnati, Jan. 22, with Dr. A. Carlton Ernstene, governor of the college for Ohio, opening the program. Dr. Dwight L. Wilbur, president of the college, will be the principal speaker at the banquet at 7 p. m. A two-part clinical pathological conference will be conducted in the afternoon. A panel discussion on "Status of the Internist in Medical Care Plans" will be moderated by Dr. George J. Hamwi, Columbus. Sixteen papers will be read by title. For information write Dr. Eugene H. Sterne Jr., Veterans Administration Hospital, 3200 Vine St., Cincinnati 20.

OREGON

Plan Student Activities Building.—A new $350,000 Student Activities Building for the University of Oregon Medical-Dental School campus in Portland is being planned. At the late October meeting of the Oregon State Board of Higher Education, preliminary plans were approved and permission was given to finalize the blueprints for the two-story building. To be located in the canyon west of the Medical School Hospital and south of the Medical Science and Administration buildings, the 100- by 116-foot structure will be constructed of reinforced concrete and will include athletic and recreational facilities. A regulation size basketball court with seating areas will take up most of the second floor. Coordinating the planning of the facility has been W. A. Zimmerman, Medical and Dental School business manager. The building will be financed through student building fees which have been accumulating since 1945. About half the money needed is now available, and the rest will be made up through bonding of future building fee income.

PENNSYLVANIA

Meeting of Physicians in Philadelphia.—The American College of Physicians will hold its 20th annual reunion of Eastern Pennsylvanians at the Sheraton Hotel, Philadelphia, Jan. 23. The program is designed to encourage participation of physicians from all parts of Eastern Pennsylvania, and a cordial invitation is extended to physicians from Delaware and New Jersey. Dr. William A. Jeffers is governor of the college for Eastern Pennsylvania. Nineteen papers are scheduled for presentation at the three sessions. At the banquet at 7 p. m. with Dr. Allen W. Cowley Sr., Harrisburg, as toastmaster, Dr. Dwight L. Wilbur, San Francisco, president of the college, will give the address of the evening on "The Third Person in Medicine." For information write Mr. E. R. Loveland, Executive Secretary, American College of Physicians, 4200 Pine St., Philadelphia 4.

Philadelphia

Dr. Gyorgy Honored.—The University of Heidelberg has conferred the degree of honorary medical doctor on an alumnus and former faculty member, Dr. Paul Gyorgy, professor of pediatrics at the University of Pennsylvania, and chief of the pediatric service of the Philadelphia General Hospital. The honor, to Dr. Gyorgy, which was proposed by the faculty of Heidelberg, and approved by the Rector and the University Senate, was presented "in recognition of his many scientific achievements in the past." Also voted an honorary M.D. was Dr. Otto Warburg, of Berlin, a Nobel Laureate and developer of the Warburg Apparatus. Dr. Gyorgy is credited with the discovery of riboflavin.

Personal.—Dr. Henry L. Bockus, chairman, department of internal medicine, University of Pennsylvania Graduate School of Medicine, has been elected to membership on the executive committee of MEDICO, (Medical International Cooperation), a private, nonprofit organization that furnishes American medical personnel, techniques, drugs, and supplies to the newly developing countries of Asia, Africa, and Latin America. A division of the International Rescue Committee, MEDICO sends teams of American physicians and surgeons, and other types of private American medical assistance to areas of the world where they are needed.—— Dr. I. S. Ravdin, John Rhea Barton Professor of Surgery, University of Pennsylvania, has been elected to the chairmanship of the Pennsylvania Plan to Develop Scientists in Medical Research at the recent meeting of the plan's executive committee, succeeding Dr. Norman H. Topping, formerly vice-president of the university who was appointed president of the University of Southern California, Los Angeles, in August.

TENNESSEE

Society Election.—The Memphis Thoracic Society, an organization of Memphis and Mid-South thoracic surgeons, internists, and medical chest physicians, has elected the following officers for 1959: Dr. Francis H. Cole, president, succeeding Dr. Felix A. Hughes Jr.; Dr. John C. King, vice-president; and Dr. Glenn E. Horton, secretary-treasurer (reelected). Physicians in the Mid-South area are invited to attend the meetings. Information may be obtained from the Secretary-Treasurer, Memphis Thoracic Society, 4915 Mockingbird Lane, Memphis 17, Tenn.

Walker Surgical Club Formed.—During the recent meeting of the American College of Surgeons in Chicago a club was formed in honor of Dr. Matthew Walker, chairman, department of surgery, Meharry Medical College, Nashville. The organization, to be known as the "Walker Surgical Club," is composed of surgeons who have received surgery training under Dr. Walker; there are presently 50 members in the club. At the organizational meeting Dr. Walker was presented with a silver tray bearing the inscription, "presented to Dr. Matthew Walker on the occasion of the founding of the Walker Surgical Club in deep appreciation of his unselfish service in the training of surgeons." Dr. Waldo L. Cain, Detroit, was elected chairman of the club and Dr. George W. Hilliard, secretary-treasurer. The club will meet once yearly during the meeting of the American College of Surgeons and has as its purpose the furtherance of the surgical program at Meharry.

TEXAS

Dr. Waksman to Lecture.—The Alpha Nu Chapter of the Phi Delta Epsilon Fraternity at the University of Texas Medical Branch, Galveston, will hold the Meyer Bodansky Lectureship Jan. 23. The guest speaker will be Selman A. Waksman, Ph.D., director, Rutgers Institute of Microbiology, New Brunswick, N. J.

Texas Society on Aging Formed.—Mr. Herbert Shore, of Dallas, has been chosen as first president of the new Texas Society on Aging, formed recently at the Driskill Hotel in Austin. Dr. Ernest W. Keil, Temple, is president-elect; Hiram J. Friedsam, Ph.D., Denton, is vice-president, and Mrs. William B. Ruggles, of Dallas, will serve as secretary-treasurer. The Texas Society on Aging is the product of a merger between the Texas Geriatric Society and the Texas Gerontological Society and carries as its slogan, "Aging is everybody's business." The new society has a membership of 600 and much of its work is in relation to the Texas Interim Legislative Committee on Aging. The Texas Society on Aging is a chapter of the national Gerontological Society, Inc., and is a nonpolitical, nonprofit, scientific society dedicated to fostering the growth and dissemination of knowledge relating to that process in medicine, physical and mental health and care, economics, employment, recreation, education, social welfare, housing and other fields, in order to advance the well-being of older persons in American culture. The society publishes a newsletter on developments in aging throughout the state and nation.

WASHINGTON

Plan Dedication of Teaching Hospital.—Dedication services for the new University of Washington Teaching Hospital have been set for April 18. Designed for teaching and research, the new hospital will accept referred patients from all parts of the state and will be a training center for 18 health

professions. Governor Albert D. Rossellini will be the principal dedication speaker. The hospital, adjacent to the Health Sciences Building at the southern edge of the university campus, has been built in two stages. Unit I, housing offices and laboratories

The new University of Washington Teaching Hospital, Seattle.

for departments concerned with patient care, was completed in 1954. Unit II, under construction, contains central service and diagnostic facilities, and outpatient clinic, and beds for 300 inpatients. The dedication will be followed by a public open house April 18 and 19.

GENERAL

Examinations by Board of Nutrition.—The American Board of Nutrition will hold the next examinations for certification as a specialist in human nutrition, during the week of April 12-18, 1959, in Atlantic City, N. J. Candidates who wish to be considered for these examinations should forward applications to the Secretary's Office not later than March 1. Application forms may be obtained from the Secretary, Dr. Robert E. Shank, Department of Preventive Medicine, Washington University School of Medicine, Euclid and Kingshighway, St. Louis.

Organize Institute of Medical Climatology.—On Nov. 20 the American Institute of Medical Climatology, a nonprofit organization, was officially formed in Philadelphia. Members include physicians, scientists, and educators. The institute sponsors a program of continuous research and education into all phases of the relationship between weather and human life. Twelve sections implement the work of the institute: medicine, biology, psychology, air pollution, biostatistics, institutional planning, industrial planning, atmospheric electricity, meteorology, public health, medical hydrology, engineering, and instrumentation. Charter members of the institute have elected the following officers: Dr. George M. Piersol, president; Very Rev. James A. Donnellon, O.S.A., first vice-president; and Harold W. Schaefer, second vice-president. Dr. Igho H. Kornblueh, 1618 Allengrove St., Philadelphia 24, is secretary.

Bahamas Serendipity Conference.—The first Bahamas Serendipity Conference will be held Jan. 18-31 at the British Colonial Hotel, Nassau, Bahamas. The conference "aims at bringing together people from various disciplines, research workers, scientists, and clinicians, to look together at a problem from their respective points of view." The following will participate as "animateurs" to stimulate discussion under the following themes:

Serendipity, R. Keith Cannan, D. Sc., Washington, D. C.
Kidney, Alfred Gilman, Ph.D., New York, N.Y.
Chemical Synthesis, Henry B. Hass, LL.D., New York City.
Discovery, Edward C. Kendall, Ph.D., Princeton, N.J.
Enzymology, Dr. I. Arthur Mirsky, Pittsburgh, Pa.
Scientific Accidents, Bernard Edward Schaar, Chicago, Ill.
Endocrinology, Dr. Abraham G. White, New York, N.Y.

Dr. B. L. Frank is the organizing physician for the Bahamas Conferences. Reservations should be made by writing directly to "Bahamas Conferences," P. O. Box 4037, Fort Lauderdale, Fla.

Report Lower Accident Rate for Large Cities.—A study by the Metropolitan Life Insurance Company's statisticians of accident mortality in the 41 U. S. cities which had 250,000 or more inhabitants at the time of the 1950 census has revealed that accident death rates for residents of these cities averaged 49.2 per 100,000 in 1955-56 as compared with 56.8 for the population of the U. S. as a whole. Of the 41 cities under review, 32 had rates below the national average. In spite of this, it is pointed out, residents of the large cities suffer a heavy loss of life from accidents, each year about 18,000 of them being fatally injured in mishaps of one kind or other. The accident death rate in 1955-56 in the large cities ranged from a low of 37.8 per 100,000 for Jersey City to a high of 77.7 for Indianapolis. The five cities with one million or more inhabitants in 1950—New York, Chicago, Los Angeles, Philadelphia, and Detroit—as a group experienced a lower rate than did groups composed of the cities with populations in various ranges under one million. For the 41 cities as a group, the motor vehicle accident death rate was about 31% below the national average.

Listing of Government Scientific Information.—The National Science Foundation has published the first bulletin in a new series which, when completed, will represent an inventory listing of all significant scientific information sources or activities within the federal government. Reportedly, the series should prove of value as an aid in directing scientists, engineers, and research librarians to the appropriate sources of government-sponsored or -supported research information in specific scientific fields. The preparation and publication of this series is one of the tasks undertaken by the foundation's Science Information Service

under its Unpublished Research Information (URI) program. The primary objective of this program is to make unclassified unpublished scientific research information easily accessible and readily available to all U. S. scientists and engineers, in and out of government. Comments or suggestions concerning the intended purpose of this series, as well as the contents of specific issues, should be addressed to: National Science Foundation, Science Information Service, Washington 25, D. C., Attention: URI Program Director.

Awards in Anesthesiology.—The first Mead Johnson awards for graduate training in anesthesiology have been granted to three physicians. Dr. Ralph S. Sappenfield, of Miami, Fla., president of the American Society of Anesthesiologists, has announced that the society would award the scholarships annually. The scholarships are made possible by funds granted by Mead Johnson & Company, Evansville, Ind. Recipients of the first awards are: (1) Dr. Robert Douglas Winship, Berkeley, Calif., a resident physician at the University of California Hospitals, San Francisco; (2) Dr. Jack Allan Gray, Dallas, Texas, who has been a resident physician in anesthesiology at Parkland Memorial Hospital since July, 1957; and (3) Dr. Thomas Franklin Wooden, who will become a resident physician in anesthesiology at Indiana University Medical Center, Indianapolis, following completion of Army service. The Mead Johnson awards are made to physicians engaged in residency training for specialization in anesthesiology, and are granted to "deserving physicians on the basis of meritorious work in clinical and research fields, and general qualifications for success in the specialty." Selection of physicians is carried out in behalf of the society by trustees of the Anesthesia Memorial Foundation, headed by Dr. John S. Lundy, of Rochester, Minn.

Society News.—New officers of the **Southwestern Dermatological Society** elected at Tucson are: Dr. Earle R. Pace, Santa Fe, president; Dr. George A. Waldriff, Albuquerque, vice-president; Dr. Henry D. Garrett, El Paso, secretary-treasurer.——Dr. Leona Baumgartner, New York City, became president of the **American Public Health Association** at the conclusion of its 86th annual meeting in St. Louis Oct. 27-31. Dr. Malcolm H. Merrill, Berkeley, was named president-elect, and will become president at the 87th annual meeting in Atlantic City Oct. 19-23, 1959. Vice-presidents elected were Drs. Abraham Horwitz, Santiago, Chile; Frederick B. Roth, Regina, Saskatchewan, Canada; and Estella Ford Warner, Albuquerque, N. M. Executive director is Dr. Berwyn F. Mattison, with headquarters at 1790 Broadway, New York 19.——New officers of the **American Society of Anesthesiologists** are as follows: president, Dr. Daniel C. Moore, Seattle, succeeding Dr. Ralph S. Sappenfield, Miami, Fla.; president-elect, Dr. Leo V. Hand, Boston; first vice-president, Dr. William O. McQuiston, Peoria, Ill.; second vice-president, Dr. George J. Thomas, Pittsburgh; secretary, Dr. Joseph E. Remlinger Jr., Chicago; assistant secretary, Dr. Robert L. Patterson, Pittsburgh; treasurer, Dr. Albert M. Betcher, New York City; assistant treasurer, Dr. Edwin Emma, Flushing, N. Y.

Awards to Medical Students.—The five winners in each of three divisions of the 1958, 13th annual Schering Award Competition have been announced by Dr. Richard McCormick, chairman of the award committee. Fifteen winners shared in the $5,700 prize money established by Schering Corporation, with individual prizes ranging from $1,000 for first prize, to $50 for fifth prize. Marvin Gottlieb, of the University of Tennessee College of Medicine, Memphis, who has won two similar awards in 1956 and 1957, received $1,000 for his paper on "The Mechanism and Current Concepts on the Treatment of Nausea and Vomiting." Frank A. Oski, of the University of Pennsylvania School of Medicine, Philadelphia, also received a first prize of $1,000 for his paper, "Current Trends in Corticosteroid Therapy in Pediatrics." The third first-place winner was Mrs. Helen S. Kaplan, of the New York Medical College, New York City, who received $1,000 for her paper on "Use of Tranquilizer Therapy in Office Practice." The three second-place winners receiving $500 each for their prize winning papers are: Marvin Anderson Jr., University of Michigan Medical School, Ann Arbor; Martha Bouck, of Queen's University Faculty of Medicine, Kingston; and Larry Samuels, University of Illinois College of Medicine, Chicago. Third, fourth, and fifth place prizes were of $250, $100, and $50, respectively. The Schering award, which began in 1940, seeks to encourage among the nation's medical students original reporting and exploration of recent developments in therapy.

Scientific Exhibit Assembly.—Medical students, interns, and residents are being urged to participate in the second annual national scientific exhibit assembly of the Student American Medical Association to be held in Chicago April 30-May 2. The program was inaugurated in 1958 and is dedicated to the contributions of medical students to research and to the advancement of the scientific exhibit as a primary medium of communication in the profession. Arrangements have been made for space to hold a total of 40 scientific exhibits; of these, 20 will be by students and 20 by interns and residents. The SAMA-Lakeside Laboratories awards will again be given, with the special honor of free all-expense trips to the American Medical Association convention and the privilege of exhibiting in

the AMA's scientific assembly, for the top student and the top intern or resident. Cash prizes and plaques will be given, with $500, $250, and $100 for award-winning exhibits by students, and equal awards for those by interns and residents. Lakeside Laboratories supports the awards and the trips. Applications must be obtained from SAMA (address Mr. Russell Staudacher, Executive Secretary, Student American Medical Association, 430 N. Michigan Ave., Chicago 11) and returned no later than Feb. 1, 1959. On Feb. 14, the 40 chosen exhibitors will be announced. These must complete their exhibits and ship them to Chicago at their own expense. Space and basic materials such as backdrop, table, chairs and lighting, will be provided free by SAMA.

Program for Health Scholarships.—The National Foundation, to help overcome shortages of personnel in the health field, has announced a multimillion-dollar scholarship program, a first step in its new expanded program. The present scholarship and fellowship program will be continued but modified and expanded where necessary. This program over the years has added over 7,600 especially trained people to those prepared to work in research and patient care. Mr. Basil O'Connor, president of the foundation, summarized the new program as follows:

The National Foundation will offer annual health scholarships to help provide four years of College education in medicine, medical social work, nursing, physical therapy, and occupational thearpy.

A minimum of 505 Health Scholarships will be offered each year, the first of them before the end of the 1959 school year. They will be made available on a geographic basis with heavily populated states receiving as many as 25—or five for each of the five professions—and with no state or territory receiving less than five health scholarships, a minimum of one for each of the five professions.

The foundation's chapters, numbering more than 3,100 will seek and accept scholarship applications, pass them on to state or territorial professional committees for selection, and will present awards to winners.

Health scholarships will be available to student citizens of the U. S. in the 49 states, the District of Columbia, Hawaii, and Puerto Rico.

Over the next 10 years this program will cost at least $12,000,000. Each scholarship awardee will receive $500 a year for four years, or a total of $2,000, providing that scholastic standards are maintained. The 505 health scholarships each year will cost over one million dollars.

Because education requirements of the five professions vary, scholarships will be made available in nursing, physical therapy and occupational therapy to graduating high school students; in medical social work, at the college junior year, extending through two years of required graduate work; and in medicine, at the college junior, senior, or first graduate year, depending upon the requirements of the medical school. For information write the National Foundation, 800 Second Ave., New York 17, N. Y.

Tuberculosis Among Kindergarten Children.—A community-wide study of the tuberculin test among kindergarten children, conducted in Kansas City, Mo., with the aid of a Christmas Seal grant from the National Tuberculosis Association and its medical section, the American Trudeau Society, has revealed a relationship between the size of the test and the presence of active tuberculosis among adults in contact with the children; it also revealed that there was no decrease in tuberculosis infection rates among kindergarten children in the 10-year period of the study, despite a marked decline in tuberculosis mortality in the community. In the survey the histoplasmin test for histoplasmosis infection was given as well as the skin test for tuberculous infection. During the period covered, from 1947 to 1957, the tests were given 35,995 kindergarten children. For seven years, nonreactors to tuberculin were retested in the first grade and it was found that, on the average, 1% of the white children and 1.4% of the Negroes had converted to positive. The rate of conversion did not fall during the period covered. The study showed that a number of new previously unknown cases of tuberculosis was found in a follow-up of the adult contacts. The percentage of children who became infected during the first year in school was relatively high and showed no tendency to decline over the period of seven years' observation. This was despite the fact that the death rate from tuberculosis for Kansas City fell during the 10 years of the survey from 31.3 to 11.7. On original testing in kindergarten, there were 597 reactors to tuberculin among the 35,995 children, the percentage being higher among the Negro children than among the white children; conversely, the percentage of reactors to histoplasmin in this city where histoplasmosis is endemic was higher among the white children. The Heart of America Tuberculosis Association, Kansas City, Mo.; the University of Kansas School of Medicine, Kansas City, Kan.; the Kansas City, Mo., Board of Education; and the Communicable Disease Center, U. S. Department of Health, Education, and Welfare, Atlanta, Ga., cooperated in the study.

Levels of Radioactivity in Milk.—The U. S. Public Health Service has reported that radioactivity levels in milk collected during August from 10 sampling stations across the country continued to be below the current permissible levels recommended by the National Committee on Radiation Protection and Measurements. Radiation levels from six stations showed a decline in strontium-90 compared with July data. These were the stations in the milksheds serving Austin, Texas; Cincinnati; Fargo, N. D.; New York City; Salt Lake City; and St. Louis. Three stations, in the milksheds serving Atlanta, Ga., Chicago, and Sacramento, Calif., reported slight increases over July. A tenth station,

in the milkshed serving Spokane, Wash., was added to the network in August. Levels of four other specific radioactive elements in milk—iodine-131, strontium-89, barium-140, and cesium-137—were also found to vary not only between samples collected from different stations of the network, but, also, between samples taken from the same stations. From past experience, month-to-month fluctuations in levels reportedly are to be expected. The National Committee on Radiation Protection and Measurements is a scientific group established under the sponsorship of the National Bureau of Standards with the cooperation of radiological organizations in the United States. The permissible levels recommended by the committee refer to average exposure over an entire lifetime and may be exceeded for short periods of time. The levels are subject to periodic evaluation and revision as new scientific data become available. Monthly composite samples of milk obtained through the cooperation of state and municipal health agencies, state departments of agriculture, and the dairy industry are analyzed for specific radioactive elements at the Robert A. Taft Sanitary Engineering Center operated by the Public Health Service in Cincinnati. About six weeks are required to complete the laboratory analysis of the samples. Average exposure over an extended period of time reportedly is the significant factor in interpreting the public health effects. Data are reported in terms of micromicrocuries per liter. For the period ending August, 1958, the 12-month average levels for these elements were: strontium-90 ranged from 4.2 to 10.7; iodine-131, from 29 to 220; strontium-89, from 24 to 115; barium-140, from 17 to 95; cesium-137, from 53 to 73.

FOREIGN

Award in Laryngology.—The International Committee for the Gould Award has announced that the selection of the recipient for the year 1958 is Prof. Fumio Nakamura, M.D., Kyoto Prefectural Medical College, Kyoto, Japan, for his electrophysiologic studies of laryngeal function. The Gould award is presented annually for "outstanding research in laryngology" to encourage and reward fundamental investigations in this field. The international committee for 1959 will consist of Sir Victor Negus, 149 Harley St., London, W.1; Prof. Cotoji Satta, No. 111 Morikawa-cho, Bunkyo-ku, Tokyo; and Dr. Hans von Leden, Medical Director, The William and Harriet Gould Foundation, 30 N. Michigan Ave., Chicago 2. The amount of the award has been increased to $300.

Medical School and Teaching Hospital in Belgian Congo.—Founded three years ago under the sponsorship of the University of Louvain, one of the oldest schools in Europe, Lovanium University in Leopoldville, the Belgian Congo, is making progress toward the organization of a complete university curriculum. To assist in the development of the medical school and the university hospital, The Rockefeller Foundation has appropriated 10,952,500 Belgian Congo francs (about $230,000) for use during the next three years. When the medical school opened in 1954, five students were enrolled; this number has now risen to 37, of whom 15 are in the first year of the course. The formative years of the school have been devoted primarily to the basic sciences and morphological studies. By the time the students reach the clinical stage of their training, the new university hospital is expected to be ready for use. The university obtained the hospital at 20% of its actual cost through an agreement to operate it for the medical needs of the region for which the government is responsible. When completed, the hospital will have a capacity of 1,000 beds and represent an investment of 4 million dollars. Two wings are in operation. The university has undertaken responsibility for public health activities in two nearby native villages, Ndjili and Matete, with a combined population of 14,000. University students, who will participate in the medical and health services, will have direct practical experience with community problems as well as with in-patients in the university hospital. The new university is coeducational and permits no racial, religious, or political discrimination. At present the university consists of a Faculty of Science which is preparing students for studies in medicine and agriculture; the Faculty of Medicine; a Faculty of Administration and Social Science which is to become a College of Law; and a Faculty of Education which is now preparing teachers for the secondary schools of the Congo and which will later be developed into a College of Liberal Arts. The Government of the Congo, the Mining Union, and private sources are all contributing to the construction of university buildings.

CORRECTIONS

Treatment of Metastatic Thyroid Carcinoma.—In the Question and Answer concerning metastatic thyroid carcinoma (THE JOURNAL, Dec. 6, 1958, page 1953) in the 10th line of the answer the symbol "μc" for microcurie was given instead of mc. for millicurie.

Journal "Backbones" December 27.—Some 20,000 copies of THE JOURNAL of Dec. 27, 1958, had been mailed before it was discovered that the wrong date (Dec. 17) had been printed on the "backbone" of those copies. The date on the front cover and inside the Dec. 27 issue is correct. We regret that this error occurred.

EXAMINATIONS AND LICENSURE

NATIONAL BOARD OF MEDICAL EXAMINERS

National Board of Medical Examiners: Part II only, April 21-22; Parts I and II, June 16-17; Part I only, Sept. 9-10. Examinations must be received at least six weeks in advance of a specific examination date. Examining centers established after close of registration. Exec. Sec., Dr. John P. Hubbard, 133 South 36th St., Philadelphia 4.

EDUCATIONAL COUNCIL FOR FOREIGN MEDICAL GRADUATES, INC.

Educational Council for Foreign Medical Graduates, Inc.: Stations around the world, Feb. 17. Deadline for foreign applications was Nov. 17. The following examination will be held Sept. 22 with application deadline of June 22. Exec. Director, Dr. Dean F. Smiley, 1710 Orrington Ave., Evanston, Ill.

BOARDS OF MEDICAL EXAMINERS

ALABAMA: *Written.* Montgomery, June 16-18. Sec., Dr. D. G. Gill, State Office Bldg., Montgomery 4.

ALASKA:* On application in Anchorage and Juneau. Sec., Dr. W. M. Whitehead, 172 South Franklin St., Juneau.

ARIZONA:* *Written Examination and Reciprocity.* Phoenix, Jan. 14-16. Sec., Dr. Thomas H. Bate, 2910 North 7th Ave., Phoenix.

ARKANSAS:* *Examination and Reciprocity.* Little Rock, June 11-12. Sec., Dr. Joe Verser, Harrisburg.

CONNECTICUT:* *Regular. Examination.* Hartford, March 10-12. Acting Sec., Dr. Louis P. Hastings, 160 St. Ronan St., New Haven. *Homeopathic. Examination.* Derby, Jan. 13. Sec., Dr. Donald A. Davis, 38 Elizabeth St., Derby.

DELAWARE: *Written Examination and Endorsement.* Dover, Jan. 13-15, Jan. 22. Sec., Dr. Joseph S. McDaniel, Professional Bldg., Dover.

FLORIDA:* *Examination.* Miami Beach, June 22-24. Sec., Dr. Homer L. Pearson, 901 N.W. 17th St., Miami 36.

GEORGIA: *Examination and Reciprocity.* Atlanta, June. Sec., Mr. C. L. Clifton, 224 State Capitol, Atlanta 3.

GUAM: *Subject to Call.* Act. Sec., Dr. F. L. Conklin, Agana.

HAWAII: *Examination.* Honolulu, Jan. 12-13. Sec., Dr. I. L. Tilden, 1020 Kapiolani St., Honolulu.

IDAHO: *Examination and Endorsement.* Boise, Jan. 12-14. Sec., Mr. Armand L. Bird, 364 Sonna Bldg., Boise.

ILLINOIS: *Examination and Reciprocity.* Chicago, Jan. 26-30. Supt. of Registration, Mr. Fredric B. Selcke, Capitol Bldg., Springfield.

KANSAS:* *Examination.* Kansas City, Jan. 16-17. *Reciprocity.* Kansas City, Jan. 14. Sec., Dr. F. J. Nash, 364 New Brotherhood Bldg., Kansas City.

MAINE: *Examination.* Portland, March 10-12. *Endorsement.* Portland, March 10. Sec., Dr. Adam P. Leighton, 142 High St., Portland.

MASSACHUSETTS: *Examination.* Boston, Jan. 13-16. Sec., Dr. Robert C. Cochrane, State House, Room 37, Boston 33.

MICHIGAN:* *Examination.* Ann Arbor and Detroit, June 8-10. Sec., Dr. E. C. Swanson, 118 Stevens T. Mason Bldg., West Michigan Ave., Lansing 8.

MINNESOTA:* *Examination.* Minneapolis, Jan. 20-22. *Reciprocity.* St. Paul, February. Sec., Dr. F. H. Magney, 230 Lowry Medical Arts Bldg., St. Paul.

MONTANA: *Examination and Reciprocity.* Helena, April 7. Sec., Dr. Thomas L. Hawkins, 555 Fuller Ave., Helena.

NEBRASKA:* *Examination.* Omaha, June. Director, Mr. Husted K. Watson, Room 1009, State Capitol Bldg., Lincoln 9.

NEW HAMPSHIRE: *Examination and Endorsement.* Concord, Mar. 11-14. Sec., Dr. Edw. W. Colby, 61 So. State St., Concord.

NEW JERSEY: *Examination.* Trenton, Jan. 20-23. Sec., Dr. Royal A. Schaaf, 28 W. State St., Trenton.

NEW MEXICO:* *Examination and Reciprocity.* Sante Fe, May 18-19. Sec., Dr. R. C. Derbyshire, 227 East Palace Ave., Santa Fe.

NORTH CAROLINA: *Reciprocity.* Southern Pines, Jan. 17. *Examination.* June. Asst. Sec., Mrs. Louise J. McNeill, 716 Professional Bldg., Raleigh.

NORTH DAKOTA: *Examination and Reciprocity.* Grand Forks, Jan. 7-10. Sec., Dr. C. J. Glaspel, Grafton.

OKLAHOMA:* *Examination.* Oklahoma City, June 2-3. Exec. Sec., Mrs. E. L. Haidek, 813 Braniff Bldg., Oklahoma City.

PUERTO RICO: *Examination and Reciprocity.* San Juan, March 3. Acting Secretary, Dr. Herminio Mendez Herrera, Box 9156, Santurce.

SOUTH DAKOTA:* *Examination.* Sioux Falls, Jan. 20-21. Exec. Sec., Mr. John C. Foster, 300 First National Bank Bldg., Sioux Falls.

UTAH: *Examination.* Salt Lake City, July 8-10. Dir., Mr. Frank E. Lees, 324 State Capitol Bldg., Salt Lake City 1.

WASHINGTON:* *Examination.* Seattle, Jan. 12-14. Sec., Mr. Thomas A. Carter, Capitol Bldg., Olympia.

WISCONSIN:* *Examination and Reciprocity.* Madison, Jan. 13-15. Sec., Dr. Thomas W. Tormey, Jr., 1140 State Office Bldg., 1 West Wilson St., Madison.

WYOMING: *Examination and Reciprocity.* Cheyenne, Feb. 2. Sec., Dr. Franklin D. Yoder, State Office Bldg., Cheyenne.

BOARDS OF EXAMINERS IN THE BASIC SCIENCES

ARKANSAS: *Examination.* Little Rock, May 4-5. Sec., Dr. S. C. Dellinger, University of Arkansas, Fayetteville.

CONNECTICUT: *Examination.* New Haven, Feb. 14. Exec. Asst., Mrs. Regina G. Brown, 258 Bradley St., New Haven 10.

FLORIDA: *Examination.* Miami, June 6. Sec., Mr. M. W. Emmel, University of Florida, Box 340, Gainesville.

IOWA: *Examination.* Des Moines, Jan. 13. Sec., Dr. Elmer W. Hertel, Wartburg College, Waverly.

KANSAS: *Examination.* Kansas City, June. Sec., Dr. L. C. Heckert, Pittsburg.

MICHIGAN: *Examination.* Ann Arbor and Detroit, Feb. 12-13. Sec., Mrs. Anne Baker, 116 Stevens T. Mason Bldg., West Michigan Ave., Lansing.

NEW MEXICO: *Examination.* Santa Fe, Jan. 18. Sec., Mrs. Marguerite Cantrell, Box 1522, Santa Fe.

OKLAHOMA: *Examination.* Oklahoma City, Mar. 27-28. Exec. Sec., Mrs. L. Haidek, 813 Braniff Bldg., Oklahoma City.

RHODE ISLAND: *Examination.* Providence, Feb. 18. Administrator of Professional Regulation, Mr. Thomas B. Casey, 366 State Office Bldg., Providence.

TEXAS: *Examination.* April 1959. Certificates issued by reciprocity and waiver on the first and fifteenth of each month. Sec., Bro. Raphael Wilson, 407 Perry-Brooks Bldg., Austin.

*Basic Science Certificate required.

GOVERNMENT SERVICES

DEFENSE DEPARTMENT

Forensic Pathology Registry.—A Registry of Forensic Pathology has been established at the Armed Forces Institute of Pathology, Washington, D. C. It will be the 24th component of the American Registry of Pathology, and it is under the sponsorship of the College of American Pathologists. The objective of the new registry is the collection of well-checked and well-documented medicolegal cases to be used as a reservoir for teaching and research. Only selected cases of medicolegal interest contributed by a qualified pathologist will be registered. The material will be incorporated in the files of the Armed Forces Institute of Pathology and become a part of its national collection of pathology.

Registry consultation on contributed cases will be limited to basic pathological changes and will not include medicolegal opinions which might involve Armed Forces Institute of Pathology staff members in court proceedings. Cases are now being accepted for registration. A six-month fellowship in forensic pathology at the Armed Forces Institute of Pathology has been provided by the college as a part of its sponsoring support.

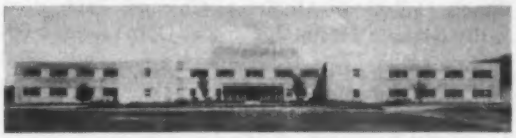
Aviation Pathology Committee Elects New Officers.—Officers for 1959 have been elected by the Joint Committee on Aviation Pathology, which held its fifth business meeting in December at the Armed Forces Institute of Pathology. They are Capt. Carl E. Wilbur, M. C., U. S. Navy, chairman, and Capt. Murray W. Ballenger, M. C., U. S. Navy, secretary. The committee, which includes medical officers of the military services of the United States, the United Kingdom, and Canada, uses the institute as the central coordinating facility for investigating the pathology of fatal aircraft accidents. Captain Wilbur, who is head of the Aviation Medicine Safety and Flight Training Branch, Bureau of Medicine and Surgery, Navy Department, Washington, D. C., will replace Col. Frank M. Townsend, M. C., U. S. Air Force deputy director of AFIP, as chairman. Captain Ballenger, who is on duty at the Armed Forces Institute of Pathology, will replace as secretary another staff member, Fathollah K. Mostofi, M. D., scientific director of the American Registry of Pathology.

AIR FORCE

Consultants Visit Medical Installations Abroad.—Drs. Garfield G. Duncan and Edgar J. Poth, national consultants to the Air Force surgeon general, recently visited medical installations in Germany, France, England, and Spain. They provided advice on problem cases in their respective specialities and conducted lectures and teaching sessions at medical installations. Doctor Duncan, of the Pennsylvania Hospital in Philadelphia, is a national consultant in internal medicine, and Doctor Poth, of the University of Texas Medical Branch in Galveston, is a national consultant in surgery.

VETERANS ADMINISTRATION

New Hospital Building at Fort Meade.—The VA Hospital at Fort Meade, S. D., occupies a new 60-bed combined medical, surgical, and administrative building Dec. 8, 1958. Fort Meade is a 720-bed neuropsychiatric hospital located 30 miles north of Rapid City on the site of a former U. S. Cavalry Post established soon after the Battle of the Little Bighorn. Fort Meade was garrisoned by Gen. George Custer's former regiment, the Fourth



New hospital at Fort Meade, S. D.

Cavalry, for many years. The new hospital building which provides beds for psychiatric patients with acute medical and surgical problems is the first phase of a long range construction program which will eventually replace all present bed facilities now housed in converted Army barracks.

PUBLIC HEALTH SERVICE

Multiple Sclerosis Leaflet.—Recent developments in research on multiple sclerosis are described in a leaflet entitled "Multiple Sclerosis—Hope Through Research." One of the recent advances reported in the leaflet is a new understanding of myelin through biochemical research. Scientists have now discovered the specific manner in which one of the essential compounds of myelin, sphingosphine, is formed in the body and are now able to produce this substance in the laboratory. This new development may lead to additional knowledge concerning the disappearance of myelin and the possible reversal of this process. Prepared by the National Institute of Neurological Diseases and Blindness, National Institutes of Health, the leaflet is listed as Public Health Service publication no. 621 and Health Information series no. 92. Single free copies may be obtained from the National Institute of Neurological Diseases and Blindness, Bethesda 14, Md. The leaflet may be purchased in quantity from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., at $3 for 100 copies.

DEATHS

Angeloni, Tito Ⓜ Providence, R. I.; Regia Università di Napoli Facoltà di Medicina e Chirurgia, Italy, 1905; died in Rocchetta al Volturno, Italy, Oct. 10, aged 79.

Bachulus, Matthew John Ⓜ Springfield, Mass.; Harvard Medical School, Boston, 1932; fellow of the American College of Surgeons; on the courtesy staff, Wesson Memorial Hospital; served on the staffs of the Westfield (Mass.) State Sanatorium, and the Springfield Hospital, where he died Oct. 27, aged 56.

Baxter, Harry Toler Ⓜ Astoria, Ill.; University of Illinois College of Medicine, Chicago, 1914; died in the Graham Hospital, Canton, Oct. 14, aged 66.

Becker, Charles Frederick Ⓜ Camden, N. J.; Jefferson Medical College of Philadelphia, 1953; member of the staff of Cooper Hospital; found dead in bed Oct. 28, aged 33.

Bellanteni, Raphael, Tuckahoe, N. Y.; Long Island College Hospital, Brooklyn, 1924; fellow of the American College of Surgeons; an associate member of the American Medical Association; director of obstetrics at the Union Hospital in New York City; consultant at the St. Joseph's Hospital in Yonkers and the Harlem Hospital in New York City; died Oct. 28, aged 59.

Blauvelt, John Hudson, Nyack, N. Y.; Cornell University Medical College, New York City, 1911; member of the American Psychiatric Association and the Industrial Medical Association; served on the staff of the Matteawan State Hospital in Beacon; died Oct. 31, aged 69.

Braun, Robert Frederick, Wausau, Wis.; Marquette University School of Medicine, Milwaukee, 1915; veteran of World War I; died Oct. 13, aged 74.

Broughton, George Anthony, La Jolla, Calif.; Medical Department of the University of California, San Francisco, 1896; an associate member of the American Medical Association; fellow of the American College of Surgeons; died Oct. 20, aged 83.

Bryan, Charles Silas Jr. Ⓜ Oakland, Calif.; Harvard Medical School, Boston, 1937; certified by the National Board of Medical Examiners; specialist certified by the American Board of Radiology; member of the American College of Radiology; veteran of World War II; clinical instructor of radiology at Stanford University School of Medicine in San Francisco; formerly on the staff of the Truesdale Hospital in Fall River, Mass.; associate radiologist at the Peralta Hospital; died Oct. 28, aged 47.

Burner, George Washington, Johnstown, Ohio; Columbus Medical College, 1892; veteran of World War I; for 10 years postmaster at Johnstown; died in Marysville Oct. 15, aged 95.

Carman, James Edwin, La Canada, Calif.; University of Minnesota College of Medicine and Surgery, Minneapolis, 1901; for many years practiced in Detroit Lakes, Minn.; died in the Elwood Sanitarium in Pasadena, Oct. 17, aged 80.

Crawford, William Shell, Tulsa, Okla.; Medical College of South Carolina, Charleston, 1914; served as a captain in the medical corps of the U. S. Army; for 26 years medical director of the Carter Oil Company; died Oct. 15, aged 67.

Deal, William Floyd Ⓜ Craig, Colo.; University of Nebraska College of Medicine, Omaha, 1919; on the staffs of St. Luke's Hospital in Denver and Memorial Hospital; died Oct. 22, aged 65.

Derr, John Sebastian Ⓜ Frederick, Md.; University of Virginia Department of Medicine, Charlottesville, 1905; specialist certified by the American Board of Radiology; fellow of the American College of Physicians; member of the American Roentgen Ray Society, Radiological Society of North America, and the American College of Radiology; from 1906 to 1908 a medical missionary in British West Africa; veteran of World War I; died Oct. 23, aged 77.

Dodd, Wilson Farnsworth Ⓜ Pleasant Hill, Tenn.; Cornell University Medical College, New York City, 1920; fellow of the American College of Surgeons; for many years a medical missionary in Turkey; during World War II was appointed medical director of the Near East Foundation in Greece; formerly medical director of the Berea (Ky.) College; on the staff of the Uplands Cumberland Mountain Sanatorium; died Oct. 30, aged 65.

Duncan, Owsley Bennett Ⓜ Paterson, N. J.; Columbia University College of Physicians and Surgeons, New York City, 1904; veteran of World War I; on the staff of the Barnert Memorial Hospital; died Oct. 15, aged 81.

Edwards, Aaron Robinson Ⓜ Ann Arbor, Mich.; Cornell University Medical College, New York City, 1938; interned at the Harper Hospital in Detroit; served a residency at the Children's Hospital

Ⓜ Indicates Member of the American Medical Association.

in Detroit and the University Hospital in Ann Arbor, Mich.; specialist certified by the American Board of Pediatrics; member of the American Academy of Pediatrics; veteran of World War II; on the staffs of the Beyer Memorial Hospital, Ypsilanti, and St. Joseph Mercy Hospital; aged 46; died Nov. 9.

Franklin, Samuel Nathan Ⓜ West Allis, Wis.; Marquette University School of Medicine, Milwaukee, 1916; formerly county coroner; died in the Mount Sinai Hospital Oct. 14, aged 76.

Frost, Horace Bird, Lavonia, Ga.; Harvard Medical School, Boston, 1896; died in the Stephens County Hospital, Toccoa, Oct. 18, aged 87.

Gale, Eugene Manson, Merrimac, Mass.; College of Physicians and Surgeons, Boston, 1914; member of the Massachusetts Medical Society; served in France during World War I; on the staff of the Amesbury (Mass.) Hospital, where he died Oct. 23, aged 67.

Geraghty, Francis Joseph Ⓜ Baltimore; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, 1926; assistant professor of medicine at his alma mater; specialist certified by the American Board of Internal Medicine; fellow of the American College of Physicians; past-president of the Baltimore City Medical Society, of which he was a member of the executive committee; president of the staff and chief of medicine at the Bon Secours Hospital; on the staffs of the Mercy, Union Memorial, and University hospitals; died Nov. 1, aged 60.

Goldrick, Harold, New York City; University of Kazan Faculty of Medicine, Russia, 1919; on the staff of the New York Polyclinic Medical School and Hospital; died Oct. 26, aged 65.

Goodrich, Joseph Albert, Glenwood, Iowa; Northwestern University Medical School, Chicago, 1905; died Oct. 13, aged 85.

Guthrie, Donald Ⓜ Sayre, Pa.; born in Wilkes-Barre, June 23, 1880; University of Pennsylvania Department of Medicine, Philadelphia, 1905; emeritus professor of clinical surgery at the University of Pennsylvania Graduate School of Medicine in Philadelphia; professor, division of surgery, Hahnemann Medical College and Hospital of Philadelphia; gave the Ernest A. Sommer Memorial Lecture in Portland, Ore., in 1941 and the Mayo Lecture, University of Michigan, Ann Arbor, in 1954; in 1932 member of the House of Delegates of the American Medical Association; past-president of the Medical Society of the State of Pennsylvania, of which he was a councilor and trustee; past-president of the Alumni Association of the Mayo Foundation, Bradford County Medical Society, and the New York and New England Railroad Surgeons; member of the American Surgical Association, Surgical Research Society, Southern Surgical Association, American Association for the Surgery of Trauma, International Society of Surgeons, Royal Academy of Medicine, Rome, Conference, Board of Physicians in Industry, American Goiter Association, Royal Medical Society, Budapest, and the Association of Railroad Chief Surgeons; honorary member of the Society of Medicine and Surgery, Rio de Janeiro; fellow, and from 1930 to 1952 a member of the board of governors of the American College of Surgeons; member of the founders group of the American Board of Surgery; in 1937 received the honorary doctor of science degree from the Lafayette College, Easton, Pa.; on June 14, 1956, at the 109th annual commencement exercises of the Hahnemann Medical College and Hospital of Philadelphia, was awarded the honorary degree of doctor of humane letters; received an alumni award of merit in January of this year from the General Alumni Society of the University of Pennsylvania in recognition of outstanding service to the university; member of the surgical staff, Mayo Clinic, Rochester, Minn., from 1906 to 1909; served on the advisory board, *American Journal of Surgery;* for many years chief surgeon of the Lehigh Valley Railroad; founder of the Guthrie Clinic and chief surgeon of Robert Packer Hospital, where he died Oct. 30, aged 78.

Heck, Charles Christian Ⓜ Syracuse, N. Y.; University of Rochester School of Medicine and Dentistry, Rochester, N. Y., 1933; member of the Industrial Medical Association; veteran of World War II; physician for the state athletic commission; served as medical director of the Syracuse University athletic department; member of the staff of St. Joseph's Hospital, where he served an internship; died Oct. 30, aged 54.

Hedrick, Thomas Wade Ⓜ Abilene, Texas; University of Texas School of Medicine, Galveston, 1916; fellow of the American College of Surgeons; on the staffs of St. Ann Hospital, Cox Memorial Hospital, and the Hendrick Memorial Hospital, where he died Oct. 21, aged 67.

Hillis, Albert Edward Ⓜ Tacoma, Wash.; University of Michigan Department of Medicine and Surgery, Ann Arbor, 1902; specialist certified by the American Board of Otolaryngology; fellow of the American College of Surgeons; past-president of the Pierce County Medical Society; on the staff of the Northern Pacific Beneficial Association; charter member of the Tacoma Lions Club; died in South Pasadena, Calif., Oct. 24, aged 84.

Horstman, Frank Marion, Northbrook, Ill.; College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, 1904; also a graduate in pharmacy; formerly on the faculty of his alma mater and the Loyola University School

of Medicine in Chicago, where he served as a member of the council; for many years on the staff of the McKinley High School in Chicago; for three years an examining physician for the Chicago, Burlington, and Quincy Railroad; formerly associated with the Augustana Hospital in Chicago; died Oct. 27, aged 80.

Huey, William, Seattle; University of Edinburgh Faculty of Medicine, Scotland, 1939; died Oct. 24, aged 45.

Hutchinson, Claribel Merrill, Pasadena, Calif.; Woman's Medical College of the New York Infirmary for Women and Children, New York City, 1887; died Oct. 26, aged 100.

Jeppson, John Rufus Ⓜ New Rochelle, N. Y.; Jefferson Medical College of Philadelphia, 1923; on the staff of the New Rochelle Hospital; died Nov. 2, aged 62.

Jones, Milton Easley Ⓜ Ocean City, Md.; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, 1915; member of the American Urological Association and the Ohio State Medical Association; formerly practiced in Columbus, Ohio, where he was associated with Mount Carmel and Grant hospitals; died in the Peninsula General Hospital, Salisbury, Oct. 21, aged 70.

Kinnamon, Frank Ⓜ Concordia, Kan.; Kansas Medical College, Medical Department of Washburn College, Topeka, 1912; county coroner and health officer; for 12 years member of the board of education; on the staff of St. Joseph's Hospital, where he died Oct. 9, aged 78.

Kohler, Delphin William Ⓜ Tacoma, Wash.; John A. Creighton Medical College, Omaha, 1916; member of the American Academy of General Practice; service member of the American Medical Association; veteran of World War I; retired from the Veterans Administration Aug. 1, 1955; formerly on the staff of the Veterans Administration Hospital in American Lake; died Oct. 28, aged 70.

Kolettis, George John Ⓜ Gary, Ind.; National University of Athens School of Medicine, Greece, 1915; died in St. Mary's Mercy Hospital Aug. 27, aged 64.

Lahn, Louis Ⓜ Great Neck, N. Y.; born in Norwich, Conn., Aug. 22, 1895; Fordham University School of Medicine, New York City, 1921; specialist certified by the American Board of Obstetrics and Gynecology; adjunct professor of gynecology and obstetrics at the New York Polyclinic Medical School and Hospital; associate in obstetrics and gynecology at the New York Medical College, Flower and Fifth Avenue Hospitals; fellow of the American College of Surgeons and the International College of Surgeons; practiced in New York City, where he was associated with the Flower and Fifth Avenue Hospitals, Hospital for Joint Diseases, Metropolitan Hospital, and the Bird S. Coler Hospital; died in the William W. Backus Hospital, Norwich, Conn., Oct. 30, aged 63.

Lape, Charles Pearley, Buffalo; Hahnemann Medical College and Hospital of Philadelphia, 1909; member of the Medical Society of the State of New York; specialist certified by the American Board of Radiology; a charter member of the Buffalo Radiological Society; served on the staff of the Millard Fillmore Hospital; died in Portland, Maine, Oct. 13, aged 75.

MacLiesh, Henry, Brooklyn; Medizinische Fakultät der Universität, Vienna, Austria, 1925; on the staff of the Unity Hospital and Adelphi Hospital; died in the Mount Sinai Hospital, New York City, Aug. 3, aged 57.

McCuskey, John Fulton Ⓜ Clarksburg, W. Va.; born in Hingham, Mass., April 6, 1910; Northwestern University Medical School, Chicago, 1937; specialist certified by the American Board of Urology; member of the American Urological Association and the Southern Medical Association; from 1953 to 1956 a member of the council of the West Virginia State Medical Association; fellow of the American College of Surgeons; past-president and secretary of the Harrison County Medical Society; during World War II was assigned to the 106th Station Hospital and served in Italy, Okinawa, and Japan; released from the service in 1946 with the rank of lieutenant colonel; past-president of the staffs of St. Mary's and Union Protestant hospitals; aged 48; died Oct. 30.

Marra, Frank Paul Ⓜ Schenectady, N. Y.; Albany (N. Y.) Medical College, 1927; member of the American Academy of General Practice; served as city councilman; died Oct. 25, aged 54.

Monroe, Alvin Henry, Elmira, N. Y.; Syracuse University College of Medicine, 1909; an associate member of the American Medical Association; served as medical examiner for the Chemung County Draft Board during World Wars I and II and served as health officer for the town of Southport; for many years county coroner; associated with the Arnot Ogden and St. Joseph's hospitals; died Oct. 23, aged 77.

O'Malley, William P., Milwaukee; University of Wisconsin Medical School, Madison, 1928; member of the American Academy of General Practice; veteran of World War I; past-president of the Wauwatosa Kiwanis Club; on the staff of the Milwaukee Hospital; died Oct. 28, aged 60.

Op de Beeck, Fernand G. P., Montvale, N. J.; Universteit Gent Faculteit der Geneeskunde, Belgium, 1902; died Sept. 3, aged 83.

Ostfield, E. Vaughn, Pittsburgh; University of Pittsburgh School of Medicine, 1958; intern at the Presbyterian Hospital; found dead at her summer cottage near Confluence Dam, Sept. 28, aged 29.

Paul, Robert Clifford Ⓜ Wooster, Ohio; University of Wooster Medical Department, Cleveland, 1892; served on the draft board during World Wars I and II; past-president and secretary of the Wayne County Medical Society; on the staff of the Wooster Community Hospital; died Oct. 28, aged 97.

Powers, Edward Sharp Ⓜ North Hollywood, Calif.; Washington University School of Medicine, St. Louis, 1935; veteran of World War II; associated with St. Joseph Hospital in Burbank and the Good Samaritan Hospital in Los Angeles; died at the International Airport in Inglewood Oct. 23, aged 50, while awaiting a plane for a vacation trip to Mexico.

Robison, E. Waid, Dallas, Texas; Baylor University College of Medicine, Dallas, 1926; veteran of World War II; served on the staffs of the Veterans Administration hospitals in Waco and Bonham; associated with the Taylor Clinic; aged 59; died Oct. 8.

Schauffler, Robert McEwen Ⓜ Kansas City, Mo.; Columbia University College of Physicians and Surgeons, New York City, 1896; formerly on the faculty of the University of Kansas School of Medicine in Kansas City, Kan.; past-president of the Jackson County Medical Society; member of the American Orthopaedic Association, Clinical Orthopaedic Society, and the American Academy of Orthopaedic Surgeons; fellow of the American College of Surgeons; for many years on the staff of the Children's Mercy Hospital; died in the Research Hospital Oct. 30, aged 87.

Seibert, Daniel Glenn, Jackson, Mo.; Vanderbilt University School of Medicine, Nashville, Tenn., 1901; for many years on the school board; died in the Southeast Missouri Hospital, Cape Girardeau, Oct. 3, aged 81.

Smith, Thomas Elmo Ⓜ Independence, Kan.; Kansas City (Mo.) Medical College, 1904; served as a member of the state legislature; vice-president and director of the Independence State Bank; on the staff of the Mercy Hospital, where he died Oct. 21, aged 80.

Sturdivant, Burton Barrett, West Union, W. Va.; Maryland Medical College, Baltimore, 1912; county health officer; during World War I was a member of the medical corps of the U. S. Army and served overseas as regimental surgeon of the 540th engineers with the rank of captain; died in Winston–Salem, N. C., Oct. 31, aged 71.

Van Arsdall, Condit Brewer Ⓜ Harrodsburg, Ky.; Johns Hopkins University School of Medicine, Baltimore, 1902; for many years served on the board of education and 14 years as chairman; served as president and secretary of Mercer County Medical Society; for many years president of the Harrodsburg Historical Society; served eight years as a member of the board of directors of the Good Samaritan Hospital in Lexington; member of the staff and board of trustees of the James B. Haggin Memorial Hospital, where he died Oct. 25, aged 83.

Whetstone, Adair K. Ⓜ Sylacauga, Ala.; Birmingham Medical College, 1914; received the Good Citizenship citation of the Civitan Club; voted "Man of the Year" by the Chamber of Commerce; on Aug. 2, 1953, Sylacauga observed "Dr. Whetstone Day" to pay tribute to him for his service to this section; church services as well as a city-wide afternoon meeting honored him and at that time three Dr. Whetstone Scholarships were established for the Sylacauga Hospital School of Nursing; on the staffs of the Drummond Fraser Hospital and the Sylacauga Hospital, where he died Oct. 19, aged 80.

Wilson, Harry Franklin Ⓜ Columbia, S. C.; born in Bowman Aug. 23, 1904; Medical College of South Carolina, Charleston, 1928; veteran of World War II and was awarded the American Defense, Armed Forces Reserve, American Theater, Asiatic–Pacific Theater with two battle stars, Victory, Occupational (Japan), and the Philippine Liberation campaign ribbons for Army service; in 1951 was awarded the Cross of Military Service of the United Daughters of the Confederacy; since 1949 director of the division of laboratories of the state health department and formerly served as director of industrial health; formerly health officer of Horry County, Beaufort County, and the Dillon–Marion Health District; died in the Veterans Administration Hospital Oct. 23, aged 54.

Woodcock, Lee Barnes, Sedona, Ariz.; Medico-Chirurgical College of Philadelphia, 1898; died Oct. 24, aged 87.

Woods, Ernest Arthur Ⓜ Ashland, Ore.; University of Minnesota College of Medicine and Surgery, Minneapolis, 1899; specialist certified by the American Board of Otolaryngology; past-president and secretary of the Southern Oregon Medical Society; past-president of the Jackson County Medical Society; formerly member of the council of the Oregon State Medical Society; served as a member of the city council; company surgeon for Southern Pacific Railroad; served on the staff of the Community Hospital; died Oct. 12, aged 83.

Wylie, Robert Lawson Ⓜ Scotts Hill, Tenn.; University of Tennessee Medical Department, Nashville, 1906; for 46 years president of the Farmers State Bank; on Oct. 14, 1950, honored on "Dr. Wylie Day" and his friends presented him with a new automobile; died Oct. 11, aged 81.

FOREIGN LETTERS

AUSTRIA

Iron-Deficiency Anemia.—At the meeting of the Society of Physicians in Vienna on Nov. 7, Drs. A. Stacher and J. Böhnel said that iron tablets do not always agree with the patients and are not always absorbed properly. Intravenous injections sometimes cause thrombosis and other side-effects. They treated a series of 47 patients, of whom 17 had essential hypochromic anemia, 16 posthemorrhagic anemia, 9 anemia caused by infection and tumors, and 5 postoperative anemia with intramuscularly administered iron-dextran complex (Myofer) and found that the hematopoietic effect of the drug was equal to that of intravenous injections. These results were corroborated in some patients by constant control of the iron content in the serum. In patients with anemia caused by infections or tumors in whom no concomitant true iron-deficiency due to hemorrhages was present, no significant improvemen. could be achieved while the other types of iron-deficiency anemia showed excellent remissions with the intramuscular treatment.

Treatment of Neuralgia.—A the same meeting Dr. F. Bodart reported on a series of 28 patients with neuralgia due to involvement of nerve roots, chiefly sciatica, whom he treated with intrathecal injections of prednisolone. Nine of the patients became free from pain and remained so. In the rest the reaction was of short duration. Meningism as a side-effect sometimes occurred. This treatment was considered a valuable addition to the measures hitherto used.

Dissemination in the Course of Eczema.—At the same meeting Dr. W. Lindemayr reported on the clinical aspect and the course of the dissemination reaction observed in 100 patients with generalized eczema which had spread from an initially circumscribed lesion. On the basis of intracutaneous and epicutaneous tests with bacterial and fungus allergens and epicutaneous tests with contact allergens which possibly have an additional effect, the speaker concluded that the dissemination reactions should be ascribed to an allergy against autoantigens. The evidence indicates that these autoantigens develop in the primary focus under the influence of bacteria and fungi.

Anemia and Geophagia.—At the meeting of the Society of Physicians in Vienna on Nov. 14, Dr. H. G. Weippl said that geophagia has long been of interest only to the psychiatrist, but it is coming to be of interest to roentgenologists and pediatric hematologists as well. Four children, their ages ranging from 1 to 2 years, with geophagia and severe hypochromic anemia were observed. Thorough examination, especially of the serum iron level, revealed iron-deficiency as the cause of the anemia. When geophagia was no longer present and the children were given iron therapy, immediate improvement of the anemia was noted. Even without iron therapy a gradual improvement could be seen. The obsessive eating of abnormal objects is rare in Europe, and the geophagia in children of this age is considered a benign, temporary disturbance which does not reflect a disturbed mental development.

BRAZIL

Diagnosis of Syphilis.—At the meeting of the São Lucas Medical Society of São Paulo in October, Dr. Luiz Migliano reported that a series of 523 positive Migliano microreactions agreed with the results of the standard and presumptive Kahn test on the same serums, and a series of 16,761 negative reactions agreed with the results of Kahn, Meinik, and Wassermann tests. The simplicity of the technique of the Migliano's reaction and the fact that a minimum of material is necessary for its performance makes it of great use for routine examinations.

Operations for Pelvic Cancer.—Dr. Azael Leistner (*Revista de medicina e cirurgia de São Paulo,* July, 1958) performed 15 pelvic exenterations (10 total and 5 partial) for carcinoma of the uterine cervix, vulva, rectum, and bladder, with local metastases to the lymph nodes. Most of the patients had been previously operated on or had received roentgen and radium therapy with unsatisfactory results. Dr. Leistner made 13 temporary cutaneous ureterostomies (he does not advise ureterosigmoidostomies because of the danger of stenosis, infection, and acidosis), 2 ileocecal bladder reconstructions, and 1 ureteroileosigmoidostomy, which should be performed in patients in whom the cancer is supposedly cured. The total volume of whole blood used during the operation was from 1.5 to 3.8 liters. In one patient he suspended the bladder and made the abdominopelvic separation with a graft of the fascia lata, with excellent results. In another, he peritonealized the pelvis suturing the anterior parietal peritoneum to the posterior peritoneum. There were five deaths in the late postoperative period

(3rd, 4th, 5th, and 10th months) and seven in the immediate postoperative period. One patient was in good condition when last seen 6 months after operation and another 23 months after operation. The adverse results were probably due to the fact that in many cases the operation was done for palliative reasons (in patients with urinary and fecal fistulas). The author believed that the operation should be done only when there is adequate equipment and a well-trained surgical staff.

Surgical Treatment of Goiter.—Dr. R. A. Santos (*Revista paulista de medicina*, vol. 53, 1958) operated on 303 patients with thyroid diseases; 185 (61.1%) with simple goiter, 110 (36.3%) with toxic goiter, 4 (1.3%) with tuberculous thyroiditis, and 4 with other conditions. Of the 50 patients whose basal metabolism was determined, in 33 with diffuse toxic goiter the metabolic rate averaged 128, and in 17 with nodular toxic goiter the rate averaged 130. The patients with diffuse goiter presented the highest and the lowest increases in metabolic rate, since the hyperthyroidism of this type of goiter responds rapidly to chemical treatment and several patients had undergone previous medical treatment with iodine. Further spontaneous remissions may occur.

In the 110 patients with toxic goiter, 111 operations were performed. There were three deaths, or a fatality rate of 2.7%, and several patients presented complications. Three suffered a thyrotoxic crisis in the immediate postoperative period. One of these patients who had been operated on before the introduction of the hibernotherapy died, and another, treated by hibernation, recovered promptly from a thyrotoxic crisis. The third patient of this group died a few hours after operation. Tetany occurred in only one patient (on the fifth day after the operation), the crisis having been successfully treated with only calcium and vitamin D. The author believes that, as a rule, no other drugs are needed. Chvostek's and Trousseau's signs were not looked for, the first being almost always present in the first days after operation and therefore without special significance. Hyperthyroidism in the last postoperative period occurred in four patients, one of whom had uncontrollable vomiting. Hyperthyroidism was much less frequent in patients with simple goiter—one case in the 185 patients. There was no case of aggravation of exophthalmus after the operation, but a few patients had slight hemorrhages.

Plastic Surgery of the Esophagus.—Dr. O. M. Dantas reported to the Associacão Paulista de Medicina a series of 16 patients with cancer of the esophagus in whom a total reconstruction of the organ was performed in 15 by using a portion of the colon and in one by using a portion of the stomach. In two patients whose tumor was situated in the lower third of the esophagus the route of access was a transdiaphragmatic thoracolaparotomy, but the author considers this a bad route, in view of the difficulties caused by the thoracopulmonary dynamics, mainly from the section of the diaphragm. From the technical standpoint this is a good route, as it widely exposes the lower third of the esophagus, permitting easy handling of the stomach and colon. For total esophagectomy, however, this route is unsuitable, since the separation of the esophagus at the level of and above the aortic arc causes dangerous reflexes. The placing of the colon in the thoracic cavity reduces the pulmonary capacity and causes compression of the left bronchus, hindering the elimination of secretions and favoring the occurrence of atelectasis. Too long an exposure of the pleural cavity with the lung collapsed favors the occurrence of pulmonary complications. These reasons led the author to abandon this route.

In three patients whose tumor was situated on the middle third of the esophagus, the operation was performed in two stages. In the first, a right thoracotomy, esophagectomy, closure of the thoracotomy, left laparotomy, distal section of the esophagus, gastrostomy, and cervical esophagostomy were accomplished. In the second a laparotomy for the closure of the gastrostomy, cologastroanastomosis, and left thoracotomy for the interposition of the colon with cervical colostomy were performed. As the interposition of the colon through the hemithorax was considered inconvenient, the author tunnelized the anterior mediastinum for the interposition of the colon. He believed that by this procedure the colon or the stomach, when placed in the anterior mediastinum, did not interfere with the function of the heart and the large vessels and was more easily tolerated by the lungs than when placed in the thoracic cavity. All the patients on whom this route was used had an uneventful postoperative course. The experience of the author with the mediastinal tunnelization led to its use for all esophageal tumors. It was even possible in several patients to perform the operation in one stage. From the point of view of the route of access, the author recommends tunnelization for the reconstruction of the esophagus. As complications of this procedure, abscess of the mediastinum, due to insufficient length of the colon and obstruction by compression of the colon against the sternal manubrium, were observed.

Labor After Previous Cesarean Section.—Dr. Martiniano Fernandes (*Revista de ginecologia e d'obstetricia*, vol. 52, 1958) reported a series of 1,515 deliveries by cesarean section. Of these, 210 patients had had a previous cesarean section and in 33 a trial of natural delivery resulted in dehiscence of the uterine scar. The good results of the transpelvic spontaneous deliveries observed in about 33% of the author's patients indicated the possibili-

ties of a trial at labor provided the patients are carefully selected. Contraindications of such a test may be ascertained by hysterography performed four months after cesarean section to discover faults in the scar. As most of the patients in this series presented obstetrical emergencies, the maternal death rate was 15% and the fetal death rate was 39.3%. The following conditions should be fulfilled for the best treatment of such patients: (1) roentgenographic proof of fetopelvic compatibility, (2) an easily dilatable cervix, (3) vertex presentation, (4) engagement of the head in the cervical canal, (5) normal uterine dynamics, and (6) absence of pain in the region of the surgical scar during the uterine contractions. In such patients the performance of version by external maneuvers, extractions, the application of forceps except at the end of the delivery, use of oxytocics, and Kristeller's maneuver are definitely contraindicated.

FRANCE

Coronary Arteriography.—At a meeting of l'Académie Nationale de Médecine, C. Arnulf of Lyon stated that he was able to inject a contrast medium into the ascending aorta during the cardiac pause induced by acetylcholine and lasting about nine seconds. By this means he obtained excellent roentgenograms of the coronary arteries first in experimental animals then in man without any untoward effects. This procedure is of value in localizing damage to the coronaries prior to surgical treatment.

Bronchogenic Cancer.—F. Denoix and co-workers (*Bulletin de l'association Française pour l'etude du cancer,* vol. 45, 1958) analyzed a series of 602 patients with bronchogenic cancer. They confirmed the existence of a correlation between these cancers and smoking. Other factors included chronic bronchitis, poor oral hygiene, inhalation of poisonous gas in World War I (even among nonsmokers), and heavy consumption of coffee. It is not yet known whether the benzopyrine in coffee is responsible for an increased incidence of lung cancer in coffee drinkers.

Respiratory Allergies in Children.—R. Mande and co-workers (*Annales de pédiatrie,* July, 1958) studied the allergenic action of house dust. Sensitivity to house dust was observed even in infants 6 months old. It was manifested by spasmodic or catarrhal rhinitis, fits of coughing, and typical asthmatic attacks. It was aggravated by tonsillectomy. An eosinophilia of 4 to 20% was observed and eosinophils were found in the bronchial secretions. In a series of 154 children treated by desensitizing injections, 1.9% were not benefited, 11.7% obtained partial improvement, and 86.4% were completely relieved.

Suppurative Adenitis due to BCG Vaccine.—R. Mande and co-workers (*La revue de la tuberculose,* vol. 3, 1958) found that in a series of 29,898 persons vaccinated with BCG vaccine, 96 developed suppurative adenitis, 48 of whom were less than 2 years old. The lesions appeared three months after vaccination; 26 involved more than one node. There were no severe reactions and recovery occurred in two or three months without treatment. In the children under 2 this complication was seen less frequently in those vaccinated by scarification than in those vaccinated by intradermal injection.

INDIA

Dementia Paralytica.—A. V. Rao (*Current Medical Practice,* vol. 2, September, 1958) reported that 33 (or 5%) of 661 consecutive new patients admitted to the Government Mental Hospital in Madras in 1954-1955 had dementia paralytica and in 1956 the incidence of this disease among new admissions was 3%. Among the 33 patients the highest age incidence was in the third and fourth decade; 2 patients were over 50 and 1 was only 20. Eleven of the patients had been mental workers and 11 had been manual laborers; 16 had pupillary abnormalities, in 8 of whom the typical Argyll Robertson pupil was seen while in 7 others incomplete Argyll Robertson pupils were noted. In one patient the pupils were dilated. Two had choroidoretinitis and two of the three patients with taboparesis had bilateral optic atrophy. Speech disturbances were present in 25 patients and consisted of slurring, anarthic mutism, nominal aphasia, palilalia, and echolalia. Twenty two of the patients had tremor of the tongue; 23 had tremor of the fingers; 4 developed convulsions; and hemiplegia was observed in 3. Associated tabes dorsalis was seen in three who also had Argyll Robertson pupils. Aural hematomas were seen in four patients. One had marked clubbing of the fingers in both hands. Two had spontaneous fractures involving both femurs due to osteoporosis and some had loss of weight. Only 11 had grandiose ideas and only 2 of these showed expansive megalomania. The simple demented type was seen in another 11; 5 showed acute maniacal excitement; 3 had chronic excitement; 2 showed depression; and 1 had auditory hallucinations. Loss of memory was common and so was insomnia. Four patients had Korsakoff's psychosis. Enlargement of the aortic shadow was seen in the chest roentgenograms of five patients. One had clinically recognizable aortic regurgitation and another had aneurysm of the ascending aorta. The spinal fluid gave a positive Wassermann reaction with a paretic type of colloidal gold curve in all patients. The blood and spinal fluid were serologically positive in 25.

UNITED KINGDOM

The Mind and the Machine.—The Nuffield Foundation has made a grant of $95,200 to the department of anatomy, University College, London, for the construction of a new computer which resembles the nervous system of an animal. This latest development in the study of the mind is based on the work of Prof. J. Z. Young on the learning mechanism of the octopus, which has remarkable ability to classify what it sees. Its skill in recognizing shapes depends on two sets of neurons that continually reactivate each other. If one set is put out of action, the octopus loses recent memories and only slowly learns any new classification, but its memory for old shapes is unaffected. It therefore seems that one of these sets forms the memory store, while the other is the printing device which inscribes new shapes on the memory. The arrangements by which the two parts are connected with each other have been worked out in detail. They involve several networks of nerve fibers, apparently a randomizing system allowing the possibility that each point in one lobe may be connected with any point in the next. It is to test these hypotheses that the new computer is to be built. It will consist of about 4,000 identical units, each of which will be an electronic analogue of a single neuron and its synaptic terminals. It is believed that in an animal information is stored at the synapses between neurons and that the receipt of nerve impulses changes the transmission power of the synapse. The units in the computer will be constructed to perform in the same way and thus give the computer a memory.

The networks will be trained to recognize shapes held in front of the computer's model eye. As each different shape is presented to the eye a different sound will be made in the machine's model ear. If the training is effective, the computer will be able to emit the appropriate sound when the shape is brought into its field of vision. It should also be within the range of the new computer to simulate the learning of the alphabet and the numerals and a limited number of more complex shapes which might even include human faces. The output stage will control the movement of levers that could simulate the movements of animals, the production of writing by man, or the generation of recognizable speech sounds. The computer should be finished by the end of 1960.

Trichomonal Vaginitis.—Of the compounds available for the local treatment of trichomonal vaginitis phenylmercuric dinaphthylmethane disulphonate is preferable to other preparations, being effective, free from toxic reactions, and acceptable to the patient, according to Murrell and Gray (*The Practitioner* **181**:611, 1958). This conclusion is based on their findings in a series of 125 patients, in 118 (94%) of whom the vagina was microscopically cleared of trichomonads at some stage during the trial. In 72 patients (60%) swabs from the vagina were negative for trichomonas after two weeks. Relapses or reinfestations occurred in 70 patients (56%) on at least one occasion: 29 (23%) of these patients defaulted at least once. Clinically, the end-results were classed as good in 97 patients (78%) and poor or failures in the rest. No intolerance or local sensitivity was encountered in any of the patients treated. In patients with heavy infestation, the vagina was swabbed under direct vision with an aqueous solution of the drug. The patients were instructed to insert two pessaries of the drug high in the vagina every night for two weeks, but to return in one week for progress to be assessed. In most patients treatment was continued with one pessary nightly for a further minimum period of four weeks, increasing to two pessaries at menstrual periods. Only those with a clinical urethritis accompanied by a positive urethral smear were given local treatment of the urethra: 60 ml. of a urethral jelly containing 0.1% of the drug, introduced by means of a tube fitted with a suitable nozzle. This procedure was repeated when necessary at subsequent visits.

Recurrent Stys.—Recurrent stys should be treated by an antibacterial ointment applied to both the nose and eyes, according to P. W. M. Copeman (*Lancet* **2**:728, 1958). This conclusion was based on the high incidence of Staphylococcus pyogenes var. aureus in the anterior nares of patients with recurrent stys. In a series of 18 patients with less than one sty a year, this organism was isolated from the nares in 8—an incidence of 44% of nasal carriers, which is similar to that in the general population. The comparable percentage in 36 patients with recurrent stys was 94. In most of these patients the application of a neomycin-bacitracin ointment to the nares was sufficient to break the run of stys, but in some it was also necessary to apply the ointment to the eyelids. It was therefore recommended that such an ointment be applied to the nares and the eyelids four times a day for 10 days, followed at biweekly intervals by courses of 7 days' treatment. This is frequent enough to prevent recolonization of the nares.

Physicians' Cathedral Window.—The Guildford division of the British Medical Association is appealing to the profession for contributions to a fund to provide one of the windows in the new Guildford cathedral, the nave of which is now nearing completion. It is believed that American physicians who served in or around Surrey in World War II may wish to participate in this gracious gesture. Donations should be sent to the Doctors' Cathedral Window Fund, c/o The Treasurer, Dr. F. A. Belam, 1 Westfield, Epsom Road, Guildford, Surrey.

MISCELLANY

REPORT ON CONFERENCE ON STAPHYLOCOCCIC DISEASE

The National Conference on Staphylococcal Disease, co-sponsored by the United States Public Health Service and the National Research Council, which met in Atlanta, Ga., headquarters of the Communicable Disease Center, Sept. 15-17, was attended by delegates from 59 professional organizations and numerous authorities on various aspects of the infection problem.

In the opening address, Dr. Leroy E. Burney, surgeon general of the Public Health Service, said that the purpose of the meeting was to review what is known about and to recommend what can be done to control staphylococcic infections which are acquired by hospital patients. These infections do not respond to the penicillin and other antibiotic drugs that kept them under control until recently.

The conference delegates agreed that the drug-resistant infection is now a problem in practically all hospitals throughout the world. Serious epidemics, although infrequent, have occurred unexpectedly in many hospitals.

Usually starting in surgical wards and in nurseries for newborn infants, the disease is spread through the hospital and out into the community by these patients, many of whom show no symptoms, such as boils and abscesses, until after they leave the hospital. Fear of causing public alarm which might deter persons from getting needed hospital care has caused some hospitals to attempt to hide their problem. However, hospital administrators who attended the conference reported a growing awareness that open recognition of the problem will contribute to its control.

Because staphylococcus germs are ubiquitous and because the drug-resistant strains permeate hospitals and their personnel, the prevention of serious infection, the delegates agreed, is a matter of finding how the dangerous strains are spread and building barriers against them. Although the delegates recognized that contaminated air and furnishings could be responsible for spreading the infection, the prevailing opinion was that personal contact is one of the most common causes. Most of their recommendations were therefore concerned with reducing this cause.

Their major recommendations included the following:

1. Organization of infection-control committees in all hospitals. These committees should have sufficient authority to investigate infections and establish and enforce hospital policies. They should include representatives from all services and divisions, all of whom should have a keen interest in the problem and should meet at regular and frequent intervals. Committee members should be responsible for seeing that hospital personnel are properly trained in anti-infection procedures and that these procedures are followed in daily activities. Local health officials should be asked to serve as consultants to these committees. The organization of infection-control committees by local medical societies, with representatives from the medical, nursing, and housekeeping staffs of all the hospitals in the area, was considered a necessary supplement to the intrahospital committee.

2. Use of an "infection log" in which all infections would be classified and pertinent data recorded. This would make it possible to determine whether infections are increasing and would also help the control committee to evaluate the effectiveness of its measures.

3. A plan for excluding from contact with patients all personnel who have boils or other active staphylococcic lesions or who are known to be carriers of dangerous and epidemic strains. Periodically, in nurseries for the newborn and at times of epidemics in other areas of the hospital, cultures should be made from personnel in order to detect, remove, and treat dangerous carriers. During epidemics, persons found to be carriers of dangerous epidemic strains should be removed from contact with patients until they are free from infection.

4. A local plan for establishing criteria for the discriminate use of antibiotics in medical and surgical treatment. Prophylactic use of antibiotics was considered highly undesirable.

5. Arrangements to store cultures from staphylococcic infections. This would help the hospital to trace the source of an epidemic if one should occur. The length of time these cultures should be stored would be decided by the infection-control committee.

6. Isolation of infectious patients, particularly those with pulmonary and skin infections, even if this means expanding isolation facilities. More emphasis on home care, in preference to hospitalization, was also suggested for patients with minor illnesses or with diseases that make them particularly vulnerable to staphylococcic infection. Diagnostic and treatment procedures in the hospital

---

A symposium on staphylococcic infections was published in THE JOURNAL March 8, 1958, page 1177.

that open the skin—which is the normal barrier to staphylococcic infection—should be kept to a sensible minimum.

7. Special precautions in nurseries for newborn infants, such as elimination of overcrowding and maintenance of rigid sanitary standards. Bathing babies immediately after birth with an antiseptic such as hexachlorophene was also recommended. Since babies are the principal source of spreading the disease into the community, sample surveys of families at periodic intervals after their babies have been discharged from the hospital were advised. Such surveys can be made by telephone, mail questionnaire, or home visit. Early detection of nursery-acquired infection would help to prevent further spread. These surveys would also indicate whether the hospital had an infection problem which it had not recognized because of the late appearance of symptoms.

8. Development of intensive and continuous training programs for professional and subprofessional members of hospital staffs. To aid in these programs, the delegates recommended that the American Hospital Association, the American Medical Association, and the Public Health Service collaborate in producing and distributing training films and other educational materials. They also proposed that the Public Health Service produce and distribute widely to hospitals a manual containing all available information on environmental disinfection and on the sterilization of equipment, linen, and other objects used with patients.

9. Strengthening of laboratory services. By the phage typing process, it is possible to identify dangerous strains of staphylococcus and thus enable hospitals to trace the source of infection. However, since it is not practical for many institutions to do this, it was recommended that the Public Health Service, through its own facilities and by assisting state and local health department laboratories, should aid in performing phage studies, particularly in epidemic situations.

10. Expansion of research. Areas in which the delegates felt more knowledge was needed before recommendations could be made included (1) the effect of environmental contamination on the spread of infection; (2) desirable features in the design and construction of hospitals and hospital equipment, as the delegates believed that not enough is known about environmental factors in the spread of infection to warrant recommending extensive or expensive changes in existing structures; (3) the value of making staphylococcic infection a reportable disease. (Several states now require reports on all such cases and results in these states will be studied.)

The group also issued strong recommendations for basic research to determine why some people are more susceptible to infection than others and how a person's resistance to it can be strengthened, and also to find better methods of treating diseases caused by virulent and epidemic strains and ways of minimizing the development of drug-resistant strains.

Dr. Burney pledged the Public Health Service to do everything within its power to put these and other recommendations made by the conference into effect. The Public Health Service has already taken action on several of these measures. Applications for grants to carry on research on staphylococcic infections are being given priority consideration by the Advisory Councils of the National Institutes of Health and, through a special appropriation of one million dollars ear-marked for the study of staphylococcic infection, grants will be made this fall to support the most promising projects.

To assist states and communities in the rapid identification of epidemics, the Communicable Disease Center is preparing diagnostic reagents on a large scale. The Center has also assumed responsibility for operating the National Reference Center for Staphylococcal Phage Typing. Through its Epidemic Intelligence Service, the Center makes available specially trained physicians and nurses to help trace the source of epidemics and bring them under control. Training programs for laboratory and other personnel of state and local health departments have also been expanded by the Center.

Highlights of some other papers presented at the conference are as follows: Dr. R. Keith Cannan, chairman of the Division of Medical Sciences of the National Research Council, co-sponsor of the conference, explained that the council's interest in the problem stemmed from its study of the treatment of traumatic injuries, particularly burns.

Dr. R. E. O. Williams of the Public Health Laboratory Service, London, described the experience of the British, who were the first to isolate antibiotic-resistant strains of staphylococcus. He reported sample surveys in England which indicate that, apart from epidemics, about 5% of clean wound operations and 10 to 15% of newborn babies develop septic lesions. Describing the "wound books" which some English hospitals maintain on all operations, he said, "It is our feeling that systems which simply require notification of cases of infection are less likely to give complete records than those that demand recording of the outcome whether infection develops or not." He also advocated painting the umbilical stumps of newborn babies, a frequent site of infection, with antiseptic dye. Summarizing these and other English practices, he said, "There is no one way in which staphylococci spread in a hospital and there is no one prophylactic method by which spread can be prevented. The routes of infection are numerous and probably often devious and the precautions

needed are many and complex. . . . Our preventive measures have therefore to minimize the endemic level, to prevent the emergence of epidemics, and to terminate epidemics when they occur."

Dr. Robert J. Anderson, chief, Communicable Disease Center, Atlanta, cited the provision of adequate laboratory service, staffed by well-trained bacteriologists and technicians, within the hospital and at all levels of organized public health as a major need that must be met in order to apply the best available methods of controlling the disease. Noting that the indiscriminate use of antibiotics in medical treatment has been deplored by clinicians for years, he said, "The time is perhaps ripe for the positive approach—the formulation and promulgation of acceptable standards for the discriminate use of antibiotics."

Dr. Vernon Knight, associate professor of medicine, Vanderbilt University School of Medicine, Nashville, Tenn., described studies which indicated that, after patients have been in the hospital for a few days, the staphylococcic strains which they normally carry on their skins or in their noses are replaced by the drug-resistant strains which prevail in the hospital environment. After discharge from the hospital, the process reverses, with the normal strains replacing the drug-resistant strains.

Dr. Thomas E. Shaffer, professor of pediatrics and preventive medicine, Ohio State University College of Medicine, Columbus, speaking on outbreaks of infections in nurseries, noted that they began about 12 years ago in England, subsequently occurred in Canada, Australia, and the United States, and finally throughout the world and were characterized in their early stages chiefly by conjunctivitis and impetigo. "Failure to recognize these commonplace and seemingly unimportant lesions as forerunners of disastrous epidemics in which serious complications have occurred has allowed epidemics to progress before control measures were established," he said. One particular strain, 80/81, is responsible for the majority of these epidemics in all parts of the world.

Dr. Chester W. Howe, associate professor of surgery, Boston University School of Medicine, said, "In terms of morbidity, prolongation of hospital stay, economy, necessity for further surgical risk, and particularly from the point of view of massive contamination of the hospital environment . . . postoperative staphylococcal infections are a particularly important problem in surgery." Although the pathways by which staphylococci gain access to a clean wound are not known, he reported suggestive evidence which indicates that the majority of such infections begin in the operating room. He urged extensive study of the problem and said, "There is no doubt that its significance is of such extent that it warrants the expenditure of the large amount of money and effort which would be required."

Dr. David E. Rogers, associate professor of medicine, New York Hospital–Cornell Medical Center, New York City, stated, "In contrast to the experience of pediatric and surgical services, staphylococcal infections in non-operated adults on medical wards are nonepidemic, occur in a small number of patients, and have been relatively constant in incidence for a number of years."

Dr. Frederick H. Wentworth, medical director of disease control activities, Ohio Department of Health, Columbus, cited case histories indicating the seriousness of family infections resulting from patients carrying the disease home from the hospital. In one family, an infant was discharged from the hospital in October, 1954, and soon showed symptoms of a hospital-acquired impetigo. From then until July, 1958, there has never been a time when one or more of the five members of the family did not have some infection, and the cost of their care, exclusive of hospital bills, has been more than $1,500.

Dr. John E. Blair, bacteriologist, Hospital for Joint Diseases, New York City, pointed out that it is not practical for most hospitals to do their own phage typing of strains since it is hard to maintain the phages and requires highly trained personnel to do the typing. He advocated the use of regional laboratories as means of keeping better control over the quality of phages and of assuring the consistency of tests. He suggested that cultures be submitted only on a series of related sources, not on isolated cases.

Dr. John C. Colbeck, chief of service in the pathology department, Shaughnessy Veterans Hospital, Vancouver, British Columbia, Canada, suggested that small hospitals may afford especially good opportunities to study how infections spread. "In large hospitals, the possible routes of spread are so numerous that the probable method of spread is all too often indeterminable. . . . It might be wise for public authorities to consider the establishment of research units, with full laboratory facilities, in the smallest hospitals."

Dr. Dean A. Clark, general director, Massachusetts General Hospital, Boston, declared that hospital-acquired staphylococcic disease is always a community problem, never limited to the four walls of a particular hospital, since many, if not most, infections in patients become apparent only after discharge. He urged that hospital administrators plan to follow up at least a random sample of discharged patients and make suitable arrangements with their medical staffs, other hospitals in the area, and the health department to collaborate in such follow-up procedures in order to assure the detection of all related cases.

Leaders of the work groups who developed recommendations based on the data presented by the speakers were Dr. Warren E. Wheeler, professor of pediatrics, Ohio State University College of Medicine, Columbus; Dr. William A. Altemeier, professor of surgery, University of Cincinnati College of Medicine; and Dr. Ivan L. Bennett Jr., professor of pathology, Johns Hopkins Hospital, Baltimore.

Chairmen of the general sessions were Dr. Isidor S. Ravdin, professor of surgery, Hospital of the University of Pennsylvania, Philadelphia; Dr. Morris Tager, professor of bacteriology and immunology, Emory University, Atlanta; and Dr. Anderson.

Dr. Harry F. Dowling, professor of medicine, University of Illinois College of Medicine, Chicago, summarized the conference. Discussants of the papers were Dr. Mark H. Lepper, professor of preventive medicine, University of Illinois College of Medicine, Chicago; Dr. Reimert T. Ravenholt of the Seattle-King County Department of Public Health, Seattle; and Dr. H. Taylor Caswell, clinical professor of surgery, Temple University School of Medicine, Philadelphia.

THE LEISURE CORNER

SEARCHING FOR TREASURE

Collecting, once the avocation and passion of monarchs and royalty, has undergone a process of extensive democratization. Today millions of people everywhere find collecting a fruitful recreation. It is especially exciting if one falls heir, probably for the first time, to an accumulation of trash piled high in an attic, a barn, a store, or a shop. Of course your first reaction may be to dump the stuff, but before you throw away a single item consider the possibility that there may be a treasure of some kind in each pile of litter. There are gold mines to be found in attics and cellars and treasure troves in overlooked nooks and corners. Occasionally a cache of money is stuffed in an old sofa, under a loose board in the floor, or in the bottom of an old clock.

During periods of war and national stress some people hide coins and bills in the strangest places, in chimneys, table legs, framed pictures, and wells. Much of the stuff hoarded for no apparent reason —books, pamphlets, newspapers, catalogs—in out-of-the-way places may have some monetary value. A leading auction gallery in Washington, D. C., displays the following axiom: "The junk of one generation is the treasure of the next." Not long ago a physician in his 70's stood at a booth in an antique show holding a toy in his hand and muttering, "I just can't believe it. I just can't believe it." The toy was a small tin boat holding a little man with a pair of oars. A spring was wound and the little tin man rowed the boat on a small pond. The price tag read $65. What the elderly physician could not believe was the series of events that had transpired. Only about a month before he had thrown this particular toy and scores of similar items into a box which he literally paid a trashman to cart off. In the very town in which he resided an antique dealer purchased the "junk" from the trashman for a dollar. One object, the small mechanical toy rowboat, finally came to rest on the shelf of another antique dealer with a price tag 65 times the original price of the toy that had been manufactured many decades before.

Similar occurrences take place thousands of times a day in the United States. Daily the unbelievable happens when treasures are discovered in so-called trash. More often, however, accumulations of trash are burned or sold as scrap paper or scrap metal. One senses lost opportunities, picturing the treasures that go up in smoke, are melted down in furnaces, or are converted to pulp in paper mills. At the same time one can get the lift of a lifetime envisioning the possibilities of the search for treasure. Take the case of a woman who found a letter that just missed being consigned to the furnace. The letter was from the daughter of the owner of the early nineteenth-century house which she had purchased. The daughter had gone to the Sandwich Islands as the wife of a missionary. For more than 20 years she wrote a weekly letter to her parents, and when the Sandwich Islands, properly Hawaii, began using postage stamps the daughter unwittingly laid the foundation for a most valuable collection. In short, what gives value to the treasures that may be found in trash is a combination of the factors that people hold dear, from mere fashion to sentimental significance or rarity.

It is quite common to see book collectors avidly searching through secondhand book stores for volumes that are off the beaten track. Some of these persons are professional book dealers, others are hobbyists. Each book is valued not necessarily because some author has poured his soul into words, but for its market value. From this vantage point, searching for the unusual in books can be a profitable hobby. It is a hobby not to be sneezed at, unless, of course, allergic tendencies to paper and dust manifest themselves. The dedicated bibliophile cares deeply about what a book says and what the author's intent is. The bibliophile wants to help disseminate the message of the author. The conventional book collector, however, derives pleasure from seeing a book listed in a catalog at a price

two or three times what he had paid for it. If he is a dealer he will look for a customer, in the hope of making a sale at a profit. It is interesting to note that in the field of books there are more potential purchasers of rare and scarce items than there are items available. The possibility of finding a literary treasure in a home library, a trunk, or a box of old books is never extinct.

In the decades between 1910 and 1940 Americans spent more than a billion dollars for items gathered and collected under the guise of trash. One person who was responsible for the awareness of the value of discarded material, and who made a fortune reselling articles to the upper crust of American society, was Elsie de Wolfe. She made collecting a serious and profitable part of her life, searching, investigating, not missing a single article that potentially contained a hidden fortune. She once became fast friends with a retired physician whose hobby it was to collect pictures, photographs, and advertisements dealing with invalids' chairs and velocipedes. He used to look for those advertised in newspapers, buy them, and then improve their designs. When he was ready to sell the chairs and velocipedes, she would offer him a modest fee, then resell the articles to curators for extravagant sums of money. Once started, the fashion of collecting was off in a cloud of dust, and, to mix metaphors, it snowballed, multiplied, and became a tidal wave. Were Elsie de Wolfe alive today it is conceivable that she would be organizing a rocket trip to the moon to look for junk.

After one has learned the various techniques and methods of recognizing and sorting the classified treasures in an accumulated basket of trash, he should try out on an antique dealer an item that looks like a "sleeper." Occasionally his poker-faced countenance may give you an inkling that you have something of value.

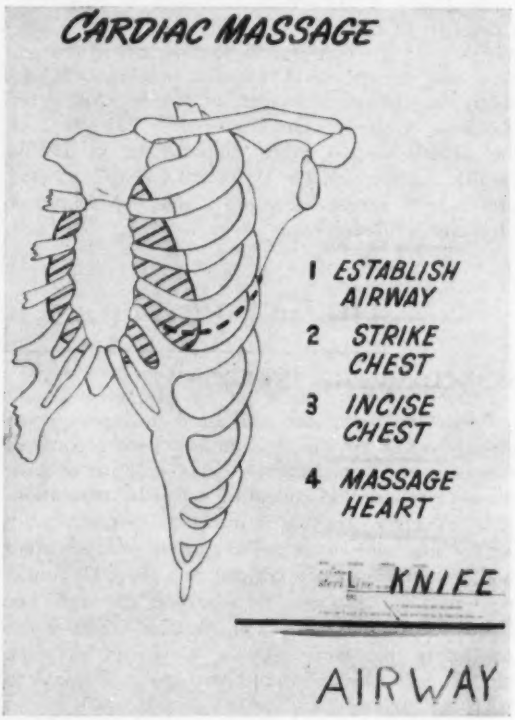
A number of years ago a physician became interested in collecting small patent medicine bottles, later adding flasks and other types of medicinal containers. His heirs, having no idea of the value of these bottles, disposed of them cheaply to a junk dealer when actually they were worth a modest fortune as medicohistorical items.

The thrill connected with searching through trash and junk is in no way diminished because some people regard it as downright silly. Think of the distinguished collectors of the past who have contributed to the present because they sensed the deeper meaning of the statement that the junk of one generation is the treasure of the next. Then go out and have some pleasure—and profit—in searching for that treasure.

CORRESPONDENCE

CARDIAC EMERGENCY

To the Editor:—Cardiac massage has become an accepted emergency procedure for use in indicated cases on the hospital floor and emergency room as well as in the surgery suite. Unfortunately the necessary equipment is not as readily available as in the operating room, and the time spent accumulating it can spell the difference between success and failure.



Poster showing directions for cardiac massage as emergency procedure.

Because of this, I have devised a simple and inexpensive poster that can be tacked in an unobtrusive location on each floor of the hospital (see figure). The 22-x-16 in. poster contains brief directions and a diagram of the chest wall illustrating the site of incision. In the lower right corner in sterilized syringe bags are a large surgical knife and a plastic airway.

L. P. Carmichael, M.D.
2295 S. W. 22nd St.
Miami 45, Fla.

MEDICAL LITERATURE ABSTRACTS

INTERNAL MEDICINE

Shock and Acute Abdominal Symptoms Complicating Acute Idiopathic Pericarditis. H. R. Witherbee Jr. and M. L. Pearce. Ann. Int. Med. 49:876-884 (Oct.) 1958 [Lancaster, Pa.].

The authors present the histories of 3 patients, which illustrate the occurrence of shock and of acute abdominal symptoms in association with acute idiopathic pericarditis. One of the patients in whom the presenting symptom was shock had an elevated serum glutamic oxalacetic transaminase activity. This was an unusual finding, and it probably reflected a severe degree of pericardial inflammation with concomitant subepicardial myocardial injury. Blood pressure rose promptly after the administration of arterenol to both patients with shock.

Abdominal pain may be a major symptom of acute pericarditis. When pain is initially confined to the abdomen and is accompanied by tenderness with guarding, the possibility of acute pericarditis can be easily overlooked, the more so since pericarditis occurs chiefly in subjects, between 20 and 40 years, in whom it may seem unnecessary to rule out cardiovascular disease before laparotomy is resorted to. Electrocardiography and frequent precordial auscultation may demonstrate the true etiology of what at first sight appears to be an "acute surgical abdomen."

Coronary Embolism: Review of the Literature and Presentation of 15 Cases. N. K. Wenger and S. Bauer. Am. J. Med. 25:549-557 (Oct.) 1958 [New York].

In the years 1929-1957 there occurred at Mount Sinai Hospital in New York 11 well-documented cases of coronary artery embolism, which were confirmed by postmortem examination, representing an incidence of 0.06% in 17,469 consecutive autopsy cases. In addition, during the 6-month period from January through June, 1957, 3 unsuspected cases of coronary artery embolism, incidental to the cause of death, were found at postmortem examination. These 14 cases and 1 other recently brought to the attention of the authors are presented. The literature regarding this disorder is reviewed. Coronary artery embolization presents as an acute cardiovascular episode characterized by varied combinations of pain, shock, arrhythmia, and pulmonary edema. It must be a consideration in the differential diagnosis of sudden death in a young adult.

Two-thirds of the patients with bacterial endocarditis as the underlying disease died suddenly as a result of the coronary embolism; one-third of the patients in whom death was due to coronary embolism had a more protracted clinical course, presenting with an acute myocardial infarction. Among the patients with an etiology other than bacterial endocarditis, all the deaths from coronary embolism occurred suddenly. This sudden death may be related to the nature of the embolic material, to the underlying disease, to the general condition of the patient, or to the fact that in patients dying later in the course of their disease the diagnosis was incorrect, as they were considered to have had a coronary thrombosis without a search being made for emboli.

Coronary artery embolism is primarily a disease of the younger age group. Fifty of 71 patients were under 40 years of age, and all but 5 were under 60 years of age. The criteria for the diagnosis of coronary embolism as the cause of death included the presence of an occluding mass in a major branch of the coronary artery, identification of the site of origin of the embolus, and the demonstration of an essentially normal arterial intima at the area of occlusion.

Muscular Metastases as First Symptom of Cancer of Lung. T. G. Villar. Med. contemp. 76:368-374 (Aug.) 1958 (In Portuguese) [Lisbon].

Muscular metastases as an early symptom of cancer of the lung are extremely rare. If they do appear, they are generally few and very small. A man, 50 years old, was admitted to the Hospital of the University of Lisbon with an illness of 3 months' duration, characterized by the appearance of diffuse, rapid growing nodules mainly located in the thorax and at the hips. The nodules were large and extremely painful, varying in size from that of a hen's egg to that of the head of a fetus. The patient had no appetite, could sleep but little, had

The place of publication of the periodicals appears in brackets preceding each abstract.

Periodicals on file in the Library of the American Medical Association may be borrowed by members of the Association or its student organization and by individuals in continental United States or Canada who subscribe to its scientific periodicals. Requests for periodicals should be addressed "Library, American Medical Association." Periodical files cover 1950 to date only, and no photoduplication services are available. No charge is made to members, but the fee for others is 15 cents in stamps for each item. Only three periodicals may be borrowed at one time, and they must not be kept longer than five days. Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order. Reprints as a rule are the property of authors and can be obtained for permanent possession only from them.

lost 10 kg. (22 lb.) in weight, and complained of a chronic cough. He had had pneumonia on the left side twice in the last 3 years. Occasionally he expectorated blood. Repeated roentgen-ray examination of the chest showed bilateral shadows in the lungs, leftward deviation of the mediastinum, and rapidly progressive interstitial sclerosis of the lungs. The sputum was negative for tubercle bacilli. It was histologically positive for malignant cells. A tumor of the main bronchus was seen on bronchoscopy. Bronchoscopic biopsy showed adenocarcinoma. Histological study of a cervical node revealed metastases of adenocarcinoma. The nodules grew rapidly, acute respiratory symptoms appeared, and the patient died 2½ months after hospitalization. Autopsy showed primary bronchogenic carcinoma, with multiple metastases to the lungs, pericardium, viscera, lymph nodes, pleura, peritoneum, vertebrae, muscles, and bone marrow of the long bones. The author reviewed 850 autopsy records of the department of pathological anatomy of the university hospital for patients who died of cancer in the last 17 years. Pulmonary cancer was reported in 91 cases, and muscular metastases in 15 of these cases. The muscular metastases were few and small in all the cases but the one reported by the author. In 5 of the 15 autopsy records in which muscular metastases were reported, the primary cancer was a bronchogenic carcinoma.

Thromboembolic Pulmonary Diseases Illustrated by Clinical Examination and Autopsy Findings in Larger Hospital Material. N. Bang, K. Iversen and H. Schmidt. Nord. med. **60**:1413-1416 (Oct. 2) 1958 (In Danish) [Stockholm].

Attention is directed to the frequency of thromboembolic pulmonary diseases and the grave threat they present to surgical and medical patients in spite of early mobilization possibly supplemented by anticoagulant treatment. Thromboembolic pulmonary disease was established in 271 of 1,788 persons, aged over 15 years, on whom autopsies were performed at a Copenhagen hospital in 1954-1955. The occluding processes comprised thrombi, emboli, and infarctions. The frequency of thromboembolic pulmonary diseases increased as the age increased. In 84 cases the course was acute, with death within 24 hours after onset of the symptoms; in 33, subacute, with death within a week; and in 26, chronic, with duration of over a week. In 128 cases there was a larvate course, and the time of origin of the symptoms could not be established; the group consisted partly of cases with insidious development of a pulmonary thrombosis or embolism and slow progression of symptoms, partly of a larger number of cases in which other grave diseases so strongly stamped the clinical picture that the pulmonary embolism escaped notice. The diagnosis was made during life in only one-sixth of the cases. Diagnosis was overlooked particularly in old and weakened patients. In every case of suddenly originated tachycardia and of sudden aggravation of an existing heart insufficiency and on every rise in temperature in bed patients in poor condition, the possibility of a pulmonary embolism must be borne in mind. If antibiotic treatment is given on suspicion of bronchopneumonia, pulmonary embolism must be considered if the temperature does not fall and the condition does not improve. If there is insufficiency with rapidly increasing cyanosis and dyspnea and gradual development of electrocardiographic changes pointing to cor pulmonale, the possibility of thrombosis of the pulmonary artery should be considered.

Action of Streptomycin and of Isonicotinic Acid Hydrazide on Tuberculous Cavities. U. Massola. Minerva med. **49**:3471-3488 (Sept. 12) 1958 (In Italian) [Turin, Italy].

A combination of streptomycin and isonicotinic acid hydrazide was administered to 162 patients with tuberculous cavities for a period of 100 to more than 200 days. The daily dosage of streptomycin was 1 Gm., and that of isonicotinic acid hydrazide ranged from 250 to 300 mg. Cavities of recent date were present in 78 patients; recurring cavities, in 24; and chronic cavities, in 60. The combined therapeutic action of streptomycin and isonicotinic acid hydrazide brought about the best results in patients with tuberculous cavities of recent date which were small in diameter. Cavities were healed in 62 patients (38.2%), healing being obtained in 46 with cavities of recent date, in 12 with recurring cavities, and in 4 with chronic cavities. It seems that prolonged therapy, rather than the size of the daily dosage, was the decisive healing factor. The antibiotic treatment of tuberculous cavities must be supported by other common therapeutic measures.

Mediastinal Teratoma with Metastizing Chorioepithelioma. A. Hallén and S. Holmberg. Nord. med. **60**:1432-1433 (Oct. 2) 1958 (In Swedish) [Stockholm].

Teratoid tumors are relatively rare formations which usually originate from the genital glands. Other places of predilection include the anterior mediastinum. The tendency to malignity is high in the embryonal teratomas of various localizations. The most common degeneration is carcinoma; chorioepitheliomas can also occur. In the case reported in a youth, aged 19 years, with acute hemorrhagic pericarditis, there was moderate gynecomastia with secretion of colostrum. The chorionic gonadotropin titer was high. Roentgenologic examination of the chest revealed a tumor-suspect density in the left lung. The disease progressed rapidly, with fatal outcome in a month. At autopsy a large

mediastinal teratoma was found, with multiple metastases to the lungs, pericardium, kidneys, and liver. The testes were normal. If gynecomastia with secretion of colostrum is found in adult males, chorioepithelioma is highly probable. If the testes are normal, an extrangenital tumor should be looked for.

Hereditary Hyperparathyroidism Associated with Recurrent Pancreatitis. C. E. Jackson. Ann. Int. Med. 49:829-836 (Oct.) 1958 [Lancaster, Pa.].

Six and possibly 7 patients with hyperparathyroidism were observed in 2 generations of one family, and in at least 2 of these patients the hyperparathyroidism was associated with recurrent pancreatitis. The hyperparathyroidism was proved in 2 brothers and a maternal uncle and aunt by excision of parathyroid adenomas and was established in their mother and another uncle by repeated demonstration of chemical abnormalities. The pedigree of hyperparathyroidism in this family suggests an autosomal dominant type of inheritance, with both males and females affected in 2 generations. The pedigrees of hyperparathyroidism in families reported in the literature are also compatible with a dominant inheritance.

In speculating on the relationship between hyperparathyroidism and recurrent pancreatitis, the author says that the most attractive theory would seem to be that the pancreatitis is secondary to stone formation in the pancreatic duct system as a result of the hypercalcemia and alkaline pancreatic secretion. The relief of symptoms of recurrent pancreatitis by parathyroidectomy in the 2 brothers in this study and in the one case reported by other investigators also suggests that the pancreatitis was in some way sequentially related to the hyperparathyroidism. However, the possibility cannot be excluded that hereditary pancreatitis could be coexisting in this family. It is planned to perform urinary amino acid studies on affected and nonaffected individuals of this family, in accordance with the suggestion of Gross, Comfort, and Ulrich that this type of study will help to distinguish the hereditary from the nonhereditary form of pancreatitis.

Interpretation of Hematologic and Serologic Findings in the Diagnosis of Infectious Mononucleosis. C. E. Bender. Ann. Int. Med. 49:852-865 (Oct.) 1958 [Lancaster, Pa.].

In the author's observations on 600 patients with infectious mononucleosis, most of whom were seen in a university population, the differential counts were regularly characterized by a lymphocytosis. The diagnosis was further substantiated by high atypical lymphocyte counts and by heterophil antibody titers as well as by clinical manifestations. The lymphocytosis was not a transient finding but was present day after day during the acute phase and early convalescence. In the absence of straightforward clinical features, both the serologic and the hematological criteria should be fully satisfied before making the diagnosis of infectious mononucleosis. From the laboratory standpoint, the basic screening procedure is the identification of atypical lymphocytes. The nonspecific nature of these cells has contributed to a willingness to regard their presence as unessential. The author's own findings indicated that atypical lymphocytes are almost pathognomonic of infectious mononucleosis. Blood smears, as prepared in the average laboratory for routine differential counts, are unsatisfactory for the identification of atypical lymphocytes. Smears should be made about one-half the usual thickness, should be well stained, should have little overlapping of cells, and should be made during the febrile period of the disease. Later in the illness it will not be possible to differentiate atypical lymphocytes from other mononuclear cells with the same degree of certainty. Neutrophils are studied separately. Inspection of the records of 200 patients seen early in the illness by the author revealed that the lowest neutrophil count coincided in some patients with the peak of the fever; in most, however, the count was lowest about the time the temperature returned to normal. The relative value of neutrophil counts late in the illness is enhanced because of the uncertainties in identification of mononuclear cells at this stage of the disease. In the series studied the average neutrophil percentage was 22.2; the range was from 6 to 49%. All the patients tested had less than 50% neutrophils; 96% had less than 40% neutrophils.

In general, a differential absorption formula, showing little or no absorption of the antibody by guinea pig antigen and complete absorption by beef-cell antigen, is diagnostic of infectious mononucleosis. Minimal serologic evidence needed to make the diagnosis is as follows: with unabsorbed serum, a sheep-cell agglutination titer of 1:56; after absorption of the serum with guinea pig kidney, a titer of 1:28, at least 1:14. After absorption with beef-cell antigen, no agglutination of sheep cells should occur. Without a typical clinical syndrome, a differential absorption test of this low order of specificity should be rechecked. Readings are made macroscopically after 2 hours' incubation at room temperature. A practical point in the heterophil test is the question of reading after overnight refrigeration versus incubation at room temperature for 2 hours. The original Paul-Bunnell technique called for readings made after overnight refrigeration of the tubes. This practice has been abandoned, since it may result in falsely high titers.

While positive presumptive tests for heterophil antibodies have been reported in many disease states, no positive differential absorption test for infectious mononucleosis-type heterophil antibodies

can be duplicated by any other condition. The need for differential absorption tests should be based more on atypical clinical and hematological features of the illness than on titer levels alone. Heterophil antibodies persisting from earlier, unrecognized attacks of infectious mononucleosis may sometimes explain the paradox of a positive heterophil test unaccompanied by characteristic clinical and hematological features of this disease. There is also evidence that other diseases may cause a resurgence of heterophil antibodies. These considerations emphasize the fallacy of basing the diagnosis on a positive heterophil test per se. While either a mononucleosis or a positive heterophil test gives assurance that the disease is infectious mononucleosis, each may occur independently in other situations. Not one or the other but both are essential to the diagnosis of infectious mononucleosis.

Congenital Hemolytic Anemia with Abnormal Pigment Metabolism and Red Cell Inclusion Bodies: A New Clinical Syndrome. R. D. Lange and J. H. Akeroyd. Blood 13:950-958 (Oct.) 1958 [New York].

The presence of abnormal inclusion bodies in erythrocytes after the ingestion of toxic substances is well known. The authors recently had the opportunity of studying a 14-year-old patient who was known to have had a hemolytic anemia since infancy. Routine hematological studies revealed unusual inclusion bodies in about 14% of her erythrocytes. There was no history of ingestion of toxic substances. The child passed a dark brown or blackish colored urine. Because it is felt that this probably represents a new clinical entity, the case history and results of special studies are reported. The diagnosis of a congenital hemolytic anemia was based on the following facts: 1. The anemia had been present since at least the age of 30 months. 2. Hemolytic disease had been demonstrated by transfusion studies which were also diagnostic of an intracorpuscular defect. 3. The Coombs tests had been consistently negative except when undiluted serum was used (this may be explained on the basis of the reticulocytes being Coombs positive). It is of interest that no abnormalities could be demonstrated in the erythrocytes of the parents.

The inclusion bodies remained unclassified in the patient studied. They did not resemble Pappenheimer bodies in that they were not rod-like, and they were not siderin. Howell-Jolly bodies were also present in this patient, but they were easily distinguishable from the inclusion bodies. The inclusion bodies resembled Heinz bodies in some of their morphologic and physical characteristics in that they were globular, refractile, and irregular in shape, stained with crystal violet, and were insoluble in water. However, they were visible when stained with Romanovsky dyes, whereas Heinz bodies are visible only by use of vital dyes or dark-field microscopy. The authors suggest that the syndrome be named "congenital hemolytic anemia with abnormal pigment metabolism and red cell inclusion bodies."

The Nephrotic Syndrome in Adults: A Common Disorder with Many Causes. R. M. Kark, C. L. Pirani, V. E. Pollak and others. Ann. Int. Med. 49:751-774 (Oct.) 1958 [Lancaster, Pa.].

The metabolic, nutritional, and clinical consequences of continued massive albuminuria constitute the nephrotic syndrome. From the experience of the authors with 98 adult patients studied by renal biopsy, it is apparent that the syndrome may be due to a variety of causes and different pathological changes in the kidney. It may be the result of (*a*) primary renal disease, such as lipid nephrosis or glomerulonephritis, (*b*) renal disease associated with systemic illnesses, such as diabetes mellitus, systemic lupus erythematosus, or amyloidosis, or (*c*) pressure effects on the venous system draining the kidney, e. g., renal vein thrombosis or constrictive pericarditis. The authors tabulate the histological diagnoses in 98 patients, ill with the nephrotic syndrome, who were studied by biopsy.

Glomerulonephritis was diagnosed in 46 patients, of whom 28 had the membranous type, 12 had the mixed (membranous and proliferative) type, and 6 had the proliferative type. In 11 patients the histological signs were typical of lipid nephrosis, which the authors define as a condition of unknown etiology characterized clinically by the nephrotic syndrome and having a good prognosis. No definitive structural changes were observed in the glomeruli of these 11 patients with the nephrotic syndrome when renal biopsies were made during or immediately after the edematous phase. There was degeneration of the tubules, the lining epithelium of which contained fat, and there was edema of the interstitial tissue. No significant abnormality could be demonstrated in the glomeruli. Clinically these patients did well. All those treated with corticotropin (ACTH) or adrenal corticosteroids had an excellent diuresis. No patient developed permanent hypertension or evidence of renal failure.

Lupus nephritis (systemic lupus erythematosus) was the cause of the nephrotic syndrome in 18 of the 98 patients. The course of the renal disease was usually rapid, and death occurred within a few months to 3 years in most patients. Diabetes mellitus was the cause of the nephrotic syndrome in 15 patients, which syndrome could not be related to the type of treatment given. The nodular glomerular lesions described by Kimmelstiel and Wilson were found in 14 of the 15 diabetics with the nephrotic syndrome. Of the remaining 8 patients with this syndrome, 3 had renal amyloidosis and 1 had severe arterial and arteriolar nephrosclerosis. Of the 4 patients in whom the nephrotic syndrome

was associated with increased pressure in the renal veins, 2 had thrombosis of the renal vein, 1 had constrictive pericarditis, and 1 had tricuspid stenosis.

Treatment in the nephrotic syndrome should be directed toward the edema, to the underlying renal condition, and to specific etiological factors when these can be determined. At present treatment is largely of a nonspecific nature, although with increasing accuracy in diagnosis this will change. Salt restriction is designed to prevent edema and to initiate diuresis, and while low-salt diets are widely prescribed, little attention is paid by many clinicians to ensuring that these are sufficiently low in sodium. Limitation of salt intake is now relatively easy with low-sodium milk powders. In some patients with severe and prolonged proteinuria, deficiencies of both calcium and potassium may occur, with resulting bone rarefaction and hypokalemia. Both these defects are corrected by high-protein diets, with the use of low-sodium milk powder, although additional potassium may be required in the early stages of treatment. The value of steroid therapy in the nephrotic syndrome is still to be determined. Many have used ACTH or cortisone in short courses for from 10 to 15 days, with large doses simply as a "diuretic," and there is little doubt that many patients will show loss of weight and of edema with this treatment.

Fungus Disease in Northern California. L. A. Rantz, C. Halde, D. Newstrand and D. Kettner. California Med. 89:245-249 (Oct.) 1958 [San Francisco].

In an attempt to get information concerning the importance of fungi as cause of disease in northern California, the authors studied specimens from superficial lesions, such as hair, skin, and fingernails, obtained from 1,544 patients. Potential pathogenic fungi, particularly Microsporum audouini, Trichophyton rubrum, and T. tonsurans, were found in 542 specimens. These findings indicated that superficial mycotic infections were commonplace but that systemic illness caused by these organisms was uncommon.

The authors report on 1,449 patients from whom sputum, bronchial and gastric washings, pleural fluid, collections of pus, and other clinical materials were obtained and studied for systemic fungous infections in the department of medicine of Stanford University. Three hundred sixty-one of these patients were infected by Coccidioides immitis, Nocardia asteroides, Actinomyces bovis, or Cryptococcus neoformans. Most of these examinations were made routinely without reference as to whether or not the patient was thought to have a mycotic disease. Infection by these 4 kinds of fungus was proved in 8 patients in the whole group in whom disease caused by these organisms was considered possible. The incidence would have been greater if the source of the materials had been more carefully screened. In several of the 8 patients the clinical situation suggested mycotic disease. It is evident that the routine examination of a large number of clinical specimens does not uncover many instances of unsuspected systemic fungous infection. Candida organisms in large numbers were recovered from the sputum, from material obtained on nasopharyngeal and vaginal swabs, and from stools of a considerable number of patients, many of whom had received antimicrobial therapy. It was nearly always difficult to assess the role of these fungi in the causation of various manifestations of the patient's illness. In no case was pulmonary candidiasis definitely diagnosed, and in only 3 cases was there positive evidence of disseminated infection caused by these organisms. Candida organisms of various species are often recovered from clinical materials, but the role they play in the causation of disease is always difficult to ascertain. Serious infection by this group of organisms is most likely to occur in debilitated persons who have received antimicrobial therapy.

Lymphogranuloma Venereum: A Review of 61 Cases. D. Erskine. Brit. J. Ven. Dis. 34:163-165 (Sept.) 1958 [London].

This report is concerned with 61 male patients who were treated for lymphogranuloma venereum in the Seamen's Hospitals, London, between 1950 and 1957. With a few exceptions, they were admitted to hospital for treatment. Most of them presented in the venereal diseases department with a swelling in the groin; only a few were referred from the casualty department or from the surgeons, and consequently the author did not see the divers manifestations of this condition. In only 4 patients were transitory primary lesions detected. With one exception, all the patients were probably infected overseas, although not all gave a history of risk of infection, and they would often have passed the initial phase before presenting with a bubo. In some cases language difficulty, and in others the patient's lack of observation, may account for the absence of reported initial lesions.

The author suspects that some patients, in whom genital herpes, balanitis, and nonspecific urethritis were diagnosed at his clinic, may have later presented themselves with buboes at other clinics. He recalls one patient who reported with 3 tiny erosive ulcers in the coronal sulcus; there was no glandular enlargement, and a diagnosis of genital herpes was made, because routine investigations such as the Frei test were negative. The serologic complement-fixation test was reported positive to dilution 1:96 after the patient had left the clinic cured of his herpes a few days later. He returned 3 months later with a recurrence of the genital herpes, and now the inguinal nodes on the left were enlarged.

The Frei test was strongly positive, and the lymphogranuloma complement-fixation test was positive to dilution 1:144. It seems that a positive Frei test may be slower in developing than the serologic reaction, and one doubtful or negative test should not be considered final in the early stages of suspicious lesions. The incubation period of the bubo averaged 5 weeks.

Thirty-two of the 61 patients were treated with Terramycin, which the author considers to be the drug of choice—21 with two 10-day courses, separated by a 7-day interval (total 4 Gm.), and 11 with one course (20 Gm.). Nine patients were treated with sulfonamides alone, 6 with sulfonamides and Aureomycin, 7 with Aureomycin alone, and 7 with 3 courses of various combinations of sulfonamides and tetracyclines. The clinical response was satisfactory in 51 of the 61 cases. The significance of this clinical cure in relation to absolute cure is difficult to assess. The reversal of the serologic reaction was delayed, although, when it was possible to check the complement-fixation test a year or so later, reversal was found in the majority of patients in whom 2 or more courses of treatment had been given.

Anuria Complicating the Treatment of Leukemia. R. A. Kritzler. Am. J. Med. **25**:532-538 (Oct.) 1958 [New York].

Urinary suppression due to precipitation of urate in the urinary outflow tract occurs in leukemia more frequently, particularly after vigorous chemotherapy, than is generally appreciated, and presents a hazard that should not be ignored. The author reviews previously reported data on this problem and presents 3 new cases of which 1 was a case of acute leukemia. The first of the 3 new cases concerned a 65-year-old woman, in whom anuria and uremia were due to blockage of the ureters and renal pelves by urates excreted in increased amounts, presumably as a consequence of treatment with radioactive phosphorus. Fluid intake at the time of treatment was not sufficient. A diuresis followed pyelostomy. The precise cause of death was not clear.

The second case concerned a 63-year-old man, in whom anuria and moderately severe uremia occurred during the 10th week of a gradual fall in leukocytes while chlorambucil was given. Diuresis and recovery followed ureteronephrostomy and removal of urate precipitate on one side. Leukemic or nonleukemic renal failure seems excluded by the fact that prior to the anuria the patient received a course of triethylene melamine without renal complications, and later, when a course of chlorambucil was repeated with adequate fluid intake, there was no oliguria, crystalluria, or significant rise in the blood urea nitrogen level. The anuria is considered to have been a complication of therapy, probably precipitated by dehydration due to hot weather.

The third patient was a 41-year-old woman, in whom a number of factors contributed to the development of acute anuria. At the time treatment was begun there had been high fever and vomiting. The pretreatment serum nonprotein nitrogen elevation was probably due in part to dehydration and in part to renal insufficiency associated with leukemic infiltration of the kidney. The recorded fluid intake during the first days of cortisone treatment appeared inadequate. The fall of circulatory leukocytes from a high level was extraordinarily precipitous. The blood uric acid level reached 35 mg. per 100 cc.

Data on the 3 cases described and on the 7 previously reported are tabulated. All but 2 of the patients were over 50 years of age. Nine of the 10 patients had chronic leukemia (6 myeloid, 3 lymphatic). In all instances the number of circulating leukocytes was high before treatment was begun and was considerably lower at the onset of anuria. The interval from the beginning of treatment to the development of oliguria was short (2 or 3 days) in some cases and long (62 days) in others. The mortality from this complication was high; only 2 patients survived.

The author feels that the following factors are contributory to the development of this rare complication: (1) age, the 5th and 6th decades; (2) high urinary output of urate and tendency to calculus formation in the untreated patient with leukemia; (3) further increase in urinary urate excretion due to destruction of large numbers of leukocytes or to inhibition of the formation of leukocytes and associated incorporation of purines by the therapeutic agent; and (4) dehydration and inadequate volume of urine. It is advisable to recommend a high fluid intake to all patients with leukemia during the first few weeks of any kind of therapy directed toward reduction of the mass of leukemic cells.

Frequency and Classification of Glucosuria in Older Hospital Patients without Marked Symptoms of Diabetes: Frequency of Diabetes in Medical Department. J. Pedersen and N. I. Nissen. Ugesk. læger **120**:1319-1323 (Oct. 2) 1958 (In Danish) [Copenhagen].

In 10% of 260 afebrile patients, aged over 50 years, without recognized diabetes or glucosuria, whose first nocturnal specimen of urine did not give positive reaction with Fehling's solution, routine examination of an average of 4 24-hour specimens of urine with Tes-Tape in the course of the first 2 weeks of hospitalization revealed spontaneous glucosuria twice as often in men as in women. The amount of glucose determined quantatively by the ferric cyanide method was minimal and intermit-

tent. None of the patients showed glucosuria in all specimens, and half of them had glucosuria in only 1 out of 4 24-hour specimens. About 3% of all the patients had diabetes, about 3% were observed for diabetes, and about 4% had nondiabetic glucosuria. Comparison of the last-named group with a nondiabetic aglucosuria control group showed identical average fasting and 24-hour blood sugar levels and glucose tolerance curves, which is regarded as proof that this glucosuria group is nondiabetic. Comparison of the group of diabetic patients with intermittent glucosuria with an equal-numbered group of patients with diabetes without glucosuria showed higher fasting blood sugar and broader glucose tolerance curves and, on the average, higher clinical renal threshold in the second group. Partial diabetes in older patients is hard to diagnose, largely because the glucosuria is intermittent. The glucose-oxidase method does not exclude diabetes in spite of repeated negative reactions. The method must be combined with examinations of the blood sugar in suspected diabetic patients whose urine gives negative Tes-Tape reaction.

SURGERY

Carcinoma of the Head of the Pancreas: A Study of 21 Cases. R. B. Eaton. Canad. J. Surg. 2:15-21 (Oct.) 1958 [Toronto].

Eaton shows that a renewed interest has developed in the treatment of carcinoma of the head of the pancreas and ampulla of Vater, since Whipple and associates in 1935 demonstrated the feasibility of pancreatoduodenectomy. Reviewing several series of cases reported in the literature, he finds that, although the operative mortality rate has been reasonable, survival in carcinoma of the head of the pancreas has been of short duration. On the other hand, lesions limited to, or originating from, the ampulla of Vater or duodenal mucosa present a brighter picture, and quite a number of 5-year cures have been reported. It seems that there is an unwarranted delay in the diagnosis and management of many of these cases before surgery is contemplated. Twenty-one patients with carcinoma of the pancreas were observed by the author in his own private practice during the last 6 years; 8 patients were found suitable for pancreatoduodenectomy, 8 had palliative operations, and 5 were considered beyond operative relief.

Pain was usually the first complaint, and it gradually increased in intensity. It varied in type from a mild colicky or spasmodic pain to a boring sensation; it was usually located in the mid-epigastrium or the hypochondriac region on the right. Occasionally, it was aggravated by the taking of food. Jaundice was the presenting symptom or sign in all but one patient, although in most patients it was not the initial symptom. Associated with these 2 main symptoms were anorexia, nausea and vomiting, fatigue, constipation, and loss of weight. The liver was enlarged in most patients. A tumor was palpable only in a few advanced cases. Preoperative therapy consisted of the administration of vitamins K, B, and C and glucose solutions and blood transfusions.

In 3 of the 8 patients subjected to pancreatoduodenectomy, an end-to-end (Billroth I type) gastrojejunostomy was carried out, the pancreatic stump being implanted end-to-side into the jejunum just beyond this anastomosis. The common bile duct likewise was implanted into the jejunum some distance beyond the latter anastomosis, and a side-to-side enteroenterostomy was made opposite the site of implantation of the pancreas. In the other 5 patients the open end of the jejunum was closed, and the common bile duct, the pancreatic stump, and the stomach were implanted (in that order from above downwards) end-to-side into the jejunum. The second method was found to be preferable, chiefly because it appeared to fit into the reconstruction more easily and reduced operation time by eliminating the enteroanastomosis. There were few digestive complaints after either method. One patient died as a result of the operation. Of the 7 patients who survived pancreatoduodenectomy, all remained alive and well for more than a year, 1 patient being still alive 30 months after operation and enjoying good health. The average survival in the 8 patients undergoing the palliative procedure was less than 6 months. Pancreatoduodenectomy is a justifiable procedure in many patients with carcinoma of the head of the pancreas.

Closed Surgery in Atrial Septal Defect: Report on 70 Cases. H. G. Davidsen. Acta chir. scandinav. 115:343-361 (No. 5) 1958 (In English) [Stockholm].

The author reports on 26 male and 48 female patients, between the ages of 4 and 47 years, with atrial septal defects who were admitted to the department of surgery of Rigshospitalet in Copenhagen. The functional capacity of the patients was recorded preoperatively and postoperatively, and the patients were grouped in 4 functional classes according to the criteria laid down by the New York Heart Association in 1953. Two of the 74 patients died on the operating table before the correction of the defect. Surgical intervention was limited to an explorative atriotomy in 5 patients. Closed operative techniques were employed in the remaining 67 patients; the semicircular suture method was used in 15 of the patients, the circumclusion suture technique was used in 40, and atrioseptopexy was performed on 12. Six anatomic types of atrial septal defect were observed at the surgical intervention: (1) superior marginal defect; (2) central defect; (3) multifenestrated membranous in-

teratrial septum; (4) simple primum defect; (5) primum intermedium defect; and (6) persistent ostium atrioventriculare commune.

The results of the operative treatment were determined by measurement of the intracardiac shunts and by the changes in the cardiac murmurs and the heart volume. It was found that, if the murmurs had disappeared completely, or if the volume of the heart had been reduced to less than 75% of the preoperative volume, the shunt had been eliminated. The semicircular suture technique failed because the sutures pulled through the myocardial fibers; this technique was abandoned on account of the unsatisfactory results. Atrioseptopexy proved particularly valuable in patients with a superior marginal defect in whom both the defect and the accompanying anomalous drainage of the right pulmonary veins may easily be corrected. Circumclusion suture gave good results in patients with central defects and multifenestrated membranous septum, and fair results in those with simple primum defect. Difficulties, however, were met even in patients with central defects if these were located too close to the opening of the inferior vena cava. None of the techniques used were effective in patients with primum intermedium defect and with persistent ostium atrioventriculare commune. Open methods which make possible repair under direct vision are regarded as the only chance for surgical treatment in these cases, although even these methods may often fail because of the frequent presence of severe valvular malformations in patients with these types of defect.

The most important operative complications associated with the closed surgical methods are those interfering with the valvular function or the drainage of the pulmonary veins. An abnormally large valve of the inferior vena cava (valvula eustachi) may be the cause of impaired drainage of the inferior vena cava. A persistent septum spurium may conceal the anatomic conditions in patients with a superior marginal defect. The circumclusion suture may cause thrombosis if a part of the suture material is left uncovered by the septal endothelium, and in 5 of 7 cases this condition did not cause any untoward reactions. Anomalies of the cardiac rhythm were uncommon except in patients operated on with the aid of hypothermia. Some postoperative complications could probably be considered as specific for the operative techniques. Nodal rhythm or atrioventricular block occurred in some patients after circumclusion suture, but disappeared again later. Transitory paresis of the right phrenic nerve was observed not infrequently until a new operative practice was introduced by which the pericardium was opened at a good distance anterior to the phrenic nerve. The operative techniques employed did not differ significantly with regard to complications and mortality rate. In addition to the 2 patients who died on the operative table before the correction of the defect, 5 died postoperatively, including 1 who died 10 months after the operation. Six of the 7 deaths occurred in patients with pulmonary artery hypertension and 5 in patients in the functional classes 3 and 4. None of the patients having normal pressures and being grouped in functional class 1 or 2 died.

Hypophysectomy in Disseminated Cancer of the Breast. E. Andersson. Acta endocrinol. 29:295-301 (Oct.) 1958 (In English) [Copenhagen].

Hypophysectomy was performed at the neurosurgical department of the University Hospital in Copenhagen on 50 women, between the ages of 39 and 72 years, with advanced cancer of the breast of from 1 to 6 years' duration, with diffuse metastases to bones and soft tissues, in whom all other methods of treatment such as irradiation and hormone therapy had failed. Immediately before the hypophysectomy the patients were given 200 mg. of cortisone by intramuscular route. In the operating room the patients were given 100 mg. of hydrocortisone dissolved in 500 cc. of dextrose solution as an intravenous drip. Immediately after the operation the patient received another intramuscular injection of 200 mg. of cortisone, and cortisone was given twice daily for the first 5 postoperative days in doses of 150, 100, 75, 50, and 25 mg. respectively. Maintenance treatment consisted of 25 mg. of cortisone given twice daily, and 100 units of thyroid extract were administered daily. The postoperative course on this regimen was smooth in most patients. There was a postoperative increase in the urinary output which resulted from the removal of the posterior lobe of the hypophysis in addition to that of the anterior lobe.

Hypophysectomy was tolerated well; only 3 patients died within the first 2 weeks. It produced a remission in 21 of the 50 patients operated on, with relief of pain and restoration of the temperature and blood to normal. Metastases remained stationary in 16 of the 21 patients, and regressed in 5. The average duration of the remission was about 8 months. The most favorable effects of hypophysectomy were obtained in menopausal patients. Patients with metastases to the liver and brain did not respond. Blindness in the right eye occurred in 6 patients in whom the optic nerve had to be cut because of technical difficulties in the course of the operation. Seventeen patients stated that they had lost the sense of smell after the operation. The reported data show that hypophysectomy can produce a remission of varying duration in otherwise hopeless cases of breast cancer with widespread metastases. There may be subjective improvement, relief of pain, and a considerably decreased consumption of analgesics in

some of the patients without remission. Hypophysectomy marks an advance in the treatment of patients with far-advanced breast cancer.

Arterial Catheterization Used for Pressure Measurement from the Left Ventricle in Patients with Chronic Constrictive Pericarditis. A. Actis Dato and F. Morino. Minerva med. 49:3296-3306 (Sept. 1) 1958 (In Italian) [Turin, Italy].

Intraventricular hemodynamic pressure in the left ventricle was measured by catheterizing the humeral artery in 10 patients with chronic constrictive pericarditis. Intraventricular hemodynamic pressure in the right heart was also recorded in 8 of these patients. The clinical findings showed that pericardial constriction, affecting in an equal degree the right and the left heart, was present in 3 patients, that a more severe constriction of the left than of the right heart was present in 5, that right ventricular insufficiency existed in 1, and that a mild form of pericardial constriction was present in 1. These findings were confirmed by intraventricular hemodynamic pressures measured by the cardiac catheterization technique. Ventricular fibrillation developed in 2 patients during the catheterization procedure. After a short pause, catheterization was resumed and completed without further disturbance.

This investigation justified the following conclusions: Cardiac catheterization is a useful means of examining congestion of either the right or the left ventricle. It can reveal on which side of the heart the pericardial constriction is more severe, and it can show that there is a correlation between the intraventricular hemodynamic pressure tracings from both ventricles and the clinical picture. Consequently, the intraventricular hemodynamic pressure tracings from both ventricles can be used as a guide to determine which side of the heart should be more exposed to surgical therapy. The authors suggest that arterial catheterization used for pressure measurement of the left ventricle should not be routinely used in patients with chronic constrictive pericarditis. It can be used only after the clinical examination, roentgenologic and angiocardiographic findings, and catheterization of the right heart have failed to formulate a clear picture of constrictive pericarditis, this being a necessary condition for instituting an effective surgical therapy.

Protrusion of Lumbar Disks Causing Marked Bilateral Weakness of the Legs. H. E. Storino, R. E. Siekert and C. S. MacCarty. Minnesota Med. 41: 687-690 (Oct.) 1958 [St. Paul].

Protruded or extruded lumbar intervertebral disks may so compress the cauda equina that the patient is rendered paraplegic with sphincteric disturbances and saddle anesthesia. A review of the records of 4,330 patients, who had undergone laminectomy at the Mayo Clinic for protrusion of a lumbar disk during the past 5 years, revealed 21 patients who had reduction in motor power in their lower extremities of 50% or more. These form the basis of this report. Less than 0.5% of patients operated on for protruded lumbar disks in the period under consideration had marked weakness of the lower limbs. Patients with slight weakness in one or both lower limbs were frequently encountered but were not included in this study. In the majority (19 patients) the onset of the episode which led to operation was well delineated, with the first symptom being sudden pain in the lower part of the back with or without concomitant pain in the lower limbs. The pain varied from mild to severe. After several days or a few weeks almost all these patients had unilateral or bilateral sciatica.

Although in a few patients the weakness developed within hours, in most the onset of muscular weakness was gradual over a period of 1 or 2 weeks. Furthermore, something usually seemed to precipitate or aggravate the weakness. Such acts as expelling an enema, sneezing in the bent-over position, gagging while brushing the teeth, or trauma in the form of strenuous muscular effort, such as lifting a heavy object, manipulative therapy, and leg traction, initiated the attack or converted a relatively mild one into one with marked muscular weakness. No correlation was found between the level of the disk involved and the distribution of pain. The pain, however, tended to decrease as the weakness appeared and increased. Sensory disturbances were noted in 18 patients and difficulty with the urinary bladder in 11; 10 of these 11 also had difficulty with the anal sphincter. Return of function after operation was excellent in 5 patients and good to fair in 7 of the 15 for whom adequate follow-up was available. In 3 patients no return of function occurred. Early diagnosis and operation are important in obtaining a successful result.

Homeoplastic and Alloplastic Transplantations of Aorta. K. Kremer and H. W. Heupel. Chirurg 29:448-453 (Oct.) 1958 (In German) [Berlin].

Eight male and 5 female patients, between the ages of 11 and 38 years, were operated on at the surgical clinic in Düsseldorf, Germany, for aneurysm of the thoracic aorta, extensive stenosis of the aortic isthmus, and severe degenerative changes in the wall associated with stenosis of the isthmus. A homeoplastic graft, 4 to 8 cm. in length, was used in 8 patients, and a cylindrical Ivalon sponge transplant, 4.5 to 7 cm. in length, was employed in 5. One of the 8 patients with free transplantation of homeoplastic aortic graft died of obstructive thrombosis which originated from an aneurysmatically

dilated intercostal artery located distal to the graft. The 5 patients in whom Ivalon sponge grafts were used were followed for periods up to one year, and the clinical results were highly satisfactory. Healing over of the grafts occurred without complications, such as effusion or allergy. The material seems to exert a specific plastic effect which leads to a rapid and close union within the suture area. The Ivalon sponge grafts have many advantages over the homeoplastic grafts: they are more easily available; they can be manufactured in any number, size, and form; they can be sterilized simply and safely and can be stored without any special care. No degenerative changes in the sense of atheromatosis or calcification have to be reckoned with when Ivalon sponge grafts are used. By the recent use of contrast-providing threads it has become possible to show the wall of the graft in the roentgenogram and hence to follow the outline of the graft in the roentgenogram and to prevent occasional complications by aneurysmatic dilatations. Careful control for additional years will, however, be required to obtain definite proof of the superiority of the Ivalon sponge grafts over the homeoplastic grafts.

Hazards Attending the Use of Esophageal Tamponade. H. O. Conn. New England J. Med. **259:** 701-707 (Oct. 9) 1958 [Boston].

Experience with the Sengstaken-Blakemore tube at the Grace-New Haven (Conn.) Community Hospital suggested that complications during the use of esophageal tamponade are more frequent, more varied, and more serious than generally recognized. The Sengstaken-Blakemore tube was employed on 81 occasions in 50 patients with esophageal varices who were hospitalized from 1950 to 1957 at this hospital. The nasogastric tube was usually passed according to the directions supplied by the manufacturer. The gastric balloon was ordinarily inflated with 100 to 250 ml. of air; the pressure maintained in the esophageal balloon ranged from 20 to 40 mm. Hg. The average period of intubation was 78 hours, ranging from 10 minutes to 12 days. The total duration of intubation per patient was 121 hours, ranging from 30 minutes to 30 days. In 19 of these patients major complications developed during esophageal tamponade; 9 of them died as a direct consequence of these complications. In 6 additional patients factors complicating esophageal tamponade contributed directly to the fatal outcome; rupture of the esophagus occurred in 1 of these. Potentially fatal abnormalities in the use of esophageal tamponade occurred during 55 of the 81 episodes. Obstruction of the airway, which was caused either by regurgitation and bronchial aspiration of bloody gastric secretion or by the displaced esophageal balloon, was the most serious complication. In addition to major complications, such as 2 deep erosions in the proximal portion of the esophagus just below the arytenoid cartilage, there were minor complications which led directly or indirectly to a fatal result. Only 10 patients were entirely free of these difficulties during esophageal tamponade. Forty-one of the 50 patients died.

Considering these fatal complications, the question arises: Should this form of therapy be abandoned? Despite these disturbing statistics, esophageal tamponade still plays an important part in the treatment of patients with bleeding esophageal varices, especially those unable to tolerate surgical intervention. Bleeding seemed to be controlled, at least transiently, by this treatment in approximately 70% of the patients. In view of the high mortality among patients with hemorrhages of esophageal varices, regardless of the type of therapy employed, it is reasonable to assume that many patients of this series who died of complications of esophageal tamponade would have died of other causes.

To prevent the most serious hazards of this therapy, more emphasis should be placed on a better understanding of the apparatus and on more careful observation of the patient. A new tube should be used for each treatment, and the gastric contents aspirated immediatly after intubation. Constant, or frequent, intermittent gastric suction should be performed to empty the stomach and to evaluate control of the bleeding. Nothing should be administered orally. When esophageal tamponade is being used, one error of technique or judgment or a single unlucky accident may be enough to set in motion a series of events leading to death. It behooves those who employ this apparatus to know it intimately, to use it carefully, to avoid predictable pitfalls, and to anticipate unpredictable complications.

Pulmonary Resections for Metastatic Lesions. J. L. Ehrenhaft, M. S. Lawrence and D. M. Sensenig. A. M. A. Arch. Surg. **77:**606-612 (Oct.) 1958 [Chicago].

The results of surgical treatment of proved metastatic pulmonary malignancy at the University Hospitals, State University of Iowa, Iowa City, are given. Fifty-five carefully selected patients underwent exploratory thoracotomy. Pulmonary resections were carried out in 37 of these patients. In the group of 28 patients who had resections for carcinoma, 3 are alive from 2 to 7 years postoperatively. Of 15 patients undergoing exploration but without resection, 3 are alive from 1 to 2 years after the operation. In the group of 9 patients who had resections for sarcoma, 1 patient is alive 5 years and 2 patients are alive 2 years after the operation. The 3 patients with metastatic sarcoma who had exploration but not resection died within 4 months. The number of patients involved is small, but the figures do not give the impression that the results

are better among the patients with metastatic sarcoma than among those with metastatic carcinoma, as found in data from another study. No indication that salvage of the patient is related to the type of pulmonary resection was found. In this series there is no correlation of the length of time between treatment of the primary lesion and the appearance of pulmonary metastatic disease with salvage of the patient. A long interval is not necessarily associated with an increased survival rate. The type of tumor and its biological behavior are probably the most important factors. The results of surgical treatment of metastatic pulmonary breast cancer have been so discouraging that it appears that pulmonary resection is not justified. Yet when distressing pulmonary symptoms can be relieved, operation seems justified, even though prolonged survival after removal of pulmonary metastatic neoplasms may not be obtained. This complex problem needs periodic reporting of results. Pulmonary resection for metastatic lesions is indicated in carefully selected patients, as a small percentage of them will be cured of their disease and others will receive palliation of distressing symptoms.

OPHTHALMOLOGY

Glaucoma Following Radiotherapy. R. F. Jones. Brit. J. Ophth. **42**:636-638 (Oct.) 1958 [London].

The author reviews previously reported cases of glaucoma after radiotherapy and presents another case. The patient was a 40-year-old woman, who complained of nasal obstruction on the right side. A large polyp was removed, which proved to be a mucoid adenocarcinoma. Between December, 1954, and January, 1955, the area was treated by radiotherapy. Later a right-sided Caldwell-Luc operation with removal of the right middle turbinate bone was undertaken, and, as a recurrence of the carcinoma was found in the middle turbinate, a partial posterior fenestration of the right side of the palate was performed with intercavity irradiation by radium.

The patient noted that the right eye was dry and the vision blurred in April, 1956, and sought an opinion on May 7, after 3 weeks of visual disturbance. The ocular tension (Schiötz) was 32 mm. Hg in the right eye and 27 mm. Hg in the left. Gonioscopy showed the angles to be of medium width. In the right eye newly formed tortuous blood vessels occupied the angle and overlaid the peripheral iris. On June 11, the ocular tension had reached 45 mm. Hg. A week later the visual acuity had deteriorated, and corneal edema was present. The ocular tension was then 50 mm. Hg, and the fundus remained hidden after that date. The patient was now in pain, and cyclodiathermy was performed on June 21. After this, ciliary injection, corneal edema, and an anterior chamber flare developed, and the ocular tension remained between 42 and 45 mm. Hg (Schiötz), although pilocarpine and Diamox were administered. Later cyclodiathermy was repeated, the patient became free of pain, and the tension fell to 22 mm. Hg. The visual acuity was now the ability to count fingers.

Theoretically, the radiotherapy could have disturbed the inflow-outflow balance by producing an occlusion in the anterior ciliary veins, in the vortex veins, or in the central retinal vein. However, the finding of dilated, tortuous, varicose, newly formed vessels in the iris and angle after radiotherapy may be considered the causative factor in the onset of glaucoma.

THERAPEUTICS

Acute Meprobamate Poisoning. L. W. Powell Jr., G. T. Mann and S. Kaye. New England J. Med. **259**:716-718 (Oct. 9) 1958 [Boston].

A review of the literature revealed 11 cases of attempted suicide with large quantities of meprobamate. The patients took amounts ranging from 10 to 40 Gm. of this drug, and all recovered. The symptoms varied from sleepiness through stupor and coma to complete respiratory and circulatory collapse. Coma, areflexia, and lowered blood pressure occurred in most patients. The pulse became rapid in most, but was slowed to 40 per minute in one. One patient was cyanotic, and another had slightly cyanotic lips. Four patients had pinpoint pupils, and 2 had dilated, fixed pupils. Treatment was in accordance with the symptoms. Gastric lavage occasionally recovered a considerable part of the ingested drug, and an oral airway was inserted in several patients to insure unobstructed respiration. Tracheal aspiration relieved respiratory embarrassment in one patient. A variety of central nervous system stimulants were used, such as dextro amphetamine sulfate, amphetamine sulfate, caffeine and sodium benzoate, pentylenetetrazol, picrotoxin, and coffee. The prognosis was generally good regardless of which analeptics were used. Meprobamate poisoning is often associated with hypotension which has been treated with intravenous infusions and vasopressor substances, such as phenylephrine and levarterenol bitartrate. Overhydration, however, should be avoided in these patients because of their flaccid state.

The autopsy findings for 2 women who succeeded in committing suicide by taking 12 and 20 Gm. of meprobamate are interesting, because they are apparently the first cases of death resulting from this tranquilizing drug. One woman weighed 110 lb. (50 kg.), and the other weighed 125 lb. (57 kg.). In the first woman 12 Gm. of meprobamate would represent a dose of 240 mg. per kilogram of body weight, and in the second woman 20 Gm. would represent 350 mg. per kilogram of body weight, both of which are below the lethal dose in animals.

The fact that other persons have survived the ingestion of much larger amounts of meprobamate suggests that early symptomatic treatment may sometimes be lifesaving in certain cases, although there may be individual variation in susceptibility to the acute toxic effects of the drug.

A New Depot Penicillin: Bipenicillinate of Diphenylpiperazine. H. Beerens and V. Macquet. Presse méd. **66**:1418-1419 (Sept. 17) 1958 (In French) [Paris].

Bipenicillinate of diphenylpiperazine (BPDP) (2,5-diphenylpiperazine bis-benzylpenicillin G) is a new penicillin salt composed of 2 molecules of penicillin G joined by a diphenylpiperazine link—a comparatively simple link free from toxicity. The new product is slow to dissolve in water or serum, and this probably explains its prolonged action. It has an antibiotic activity of 1,310 units per milligram. Experiments showing that the drug was well tolerated and that it produced high concentrations in the blood were soon followed by clinical trials in which equally good results were reported. The findings so obtained have been confirmed by the present study in which the authors investigated the levels of penicillemia found in patients after the intramuscular administration of BPDP, procaine penicillin, and Bipenicillin (a mixture of 600,000 units of procaine penicillin and 400,000 units of penicillin G).

Comparison of the 3 sets of figures obtained showed that, while the blood levels produced by each of these forms of penicillin were identical 3 hours after administration, the subsequent rate of decline was lowest for BPDP, so that 9 hours after administration the levels produced by this drug were higher than those produced by the other 2. The injection of one million units of BPDP produced blood levels of more than 1 unit per milliliter in 15 minutes, and a maximum concentration of more than 3 units per milliliter in one hour. The prolonged action of the new penicillin was shown by the fact that effective therapeutic concentrations were still present 12 and 24 hours after injection. Tolerance for BPDP was perfect; the intramuscular injections were painless, and none of the patients suffered any cutaneous or anaphylactic reactions.

A Clinical and Laboratory Comparison of the Effects of Commonly Used Vasodilator Drugs on Arterial Diseases. J. M. Stallworth, W. H. Lee, C. Belisle and D. B. Nunn. Am. Surgeon **24**:700-708 (Oct.) 1958 [Baltimore].

Arlidin, Ilidar, Priscoline, and Drug 5029 were used in this investigation. Nylidrin (Arlidin) hydrochloride is a synthetic compound belonging to the epinephrine–ephedrine group. Its primary sympathomimetic actions are to dilate the small vessels in skeletal muscle and to increase cardiac output. Azapetine (Ilidar) hydrochloride is a dibenzasepine adrenergic blocking drug. It has been described as being adrenolytic and sympatholytic, having direct vasodilating effect on arteries and having an epinephrine reversal property. Tolazoline (Priscoline) hydrochloride is related to both sympathomimetic amines and histamines. This drug is reported to act synergistically with epinephrine on the animal heart and to increase cardiac output. In addition, it supposedly is an adrenolytic and sympatholytic agent. Phenoxyisopropylnorsuprifen (Drug 5029) is a European product. Reports on this drug indicate that its properties and structure resemble those of nylidrin hydrochloride.

Fifteen patients with peripheral vascular diseases underwent detailed laboratory studies before, during, and after infusions of the 4 vasodilators. None of the drugs showed consistently good results in all types of vascular diseases. The responses varied not only between persons with similar diseases but also from one extremity to another in the same person. Ilidar and Priscoline proved most effective in the majority of patients, especially as indicated by the detailed plethysmographic and temperature studies. There is excellent correlation between the effects of these drugs on the conjunctival vessels and the small vessels in the extremities, vessels that are easily accessible to photography in the testing of vasodilator drugs.

Vasodilator drugs that increase cardiac output must be administered with great caution in patients with heart disease. Additional studies on laboratory animals are indicated with regard to the effects of these drugs on the cardiac contractile force. It is postulated that each major system of arteries has its own "chemoreceptor mechanism," causing tremendous variations in the effects of vasoreactive drugs in different parts of the body at the same time.

Penicillin Treatment as Cause of Difficulties in the Diagnosis of Neurosyphilis. M. C. Mackenzie-Van Der Noordaa and F. M. Haagsma. Nederl. tijdschr. geneesk. **102**:1595-1597 (Aug. 16) 1958 (In Dutch) [Amsterdam].

When patients with neurosyphilis are treated with penicillin, the typical signs of dementia paralytica may disappear from the cerebrospinal fluid within a year, despite the fact that the patient's condition becomes progressively worse and the diagnosis of dementia paralytica has been confirmed. The authors observed this in 4 patients. If a patient has the clinical symptoms of dementia paralytica, although the spinal fluid does not show the characteristic changes, it should be borne in mind that a recent course of penicillin treatment may have masked the spinal fluid signs. Neurosyphilis is most likely to develop in patients who received inadequate or no treatment for their primary syphilitic infection. Therefore, penicillin

should never be given to patients who happen to have a positive Wassermann reaction, unless the spinal fluid has first been tested for evidence of neurosyphilitic changes.

Clinical Experience with Warfarin Sodium. M. Toohey. Brit. M. J. 2:892-893 (Oct. 11) 1958 [London].

Warfarin sodium is a unique coumarin compound in that it can be given intravenously as well as by mouth. It has been stated that warfarin sodium is the "anticoagulant of choice." This paper describes observations on its use in 175 patients, most of whom had cardiovascular disease (myocardial infarction or cardiac failure) and the remainder had phlebothrombosis and pulmonary embolism. Treatment was controlled by the simultaneous use of Quick's and Owren's methods. A therapeutic level of between 2 and 3 times the normal control time (ideally 2½ times) was maintained when assessing results by Quick's method. For Owren's technique a level of between 10 and 14% was aimed at. Warfarin sodium was found to be a rapidly acting drug in that 95% of all patients reached a therapeutic prothrombin time in 36 hours. With daily doses of the drug just sufficient to maintain a therapeutic prothrombin time, the duration of action is approximately 36 hours. In large doses warfarin sodium has a sustained effect of up to 4 or 5 days. Therefore, large doses should be avoided. The usually recommended initial dose of 60 to 75 mg. proved far too much in this series; 35-to-50-mg. doses proved perfectly adequate for initial therapy, and it is inadvisable to exceed 50 mg. as an initial dose. The over-all average maintenance dose was 9 mg., and 80% of all patients were maintained on daily doses of between 5 and 15 mg.

Warfarin sodium proved extremely easy to control, and it probably ranks with phenindione as one of the 2 best anticoagulant drugs available for short-term therapy. Initial experience with warfarin sodium shows that it is also a useful anticoagulant for long-term therapy. In prescribing the anticoagulant, great care must be taken to allow for its cumulative effect. In this respect warfarin sodium resembles phenylpropyl-hydroxycoumarin, which has proved a reliable anticoagulant for long-term therapy. To obtain the best results with warfarin sodium, it is necessary to have available a strength of tablet with which to prescribe variations in dose of 0.5 mg. Scored 3-mg. and 5-mg. tablets would be ideal.

Clinical Evaluation of "Miradon." G. Kellaway. Brit. M. J. 2:889-891 (Oct. 11) 1958 [London].

Since the introduction of bishydroxycoumarin (Dicumarol) a number of hydroxycoumarin and indanedione derivatives, causing depression of the prothrombin activity of blood, have become available for use as anticoagulants. They all suffer the disadvantage of being potentially dangerous and require frequent estimations of the prothrombin time for their control. The new anticoagulant, anisindione (Miradon), appears to be more rapidly effective than, and just as readily controlled as, any anticoagulant in current use. In previous tests on animals Miradon had given no evidence of toxicity. This report is concerned with its therapeutic use in 25 patients requiring anticoagulant therapy.

The initial response to a loading dose of 300 mg. was rapid, and some effect upon prothrombin time was evident in most subjects in 6 hours. More than 50% of the patients had prothrombin levels within the desired therapeutic limits (prothrombin activity of 10 to 20%) at 24 hours, and 86% of subsequent estimations of the prothrombin time were within similar limits. Normal prothrombin levels were recorded between 36 and 72 hours after cessation of treatment, and an even response was evident during therapy. Vitamin K_1 produced a rapid reversal of anticoagulant action. Compared with other anticoagulants, Miradon appears to approach more closely to the "ideal" for a short-term anticoagulant than any at present in common use. The uniformity of response to a single daily dose suggests that it would prove satisfactorily also in long-term therapy.

Contribution to Problem of Failure of Oral Therapy in Patients with Diabetes Mellitus. S. E. Strauzenberg, H. Haller and H. Meyer. München. med. Wchnschr. 100:1535-1540 (Oct. 3) 1958 [Munich, Germany].

The authors report on 1,000 patients with diabetes mellitus who were treated with orally administered sulfonylurea compounds. From the beginning of their administration these drugs did not exert any effect on the carbohydrate metabolism of 202 (20.3%) of the 1,000 patients, who therefore were considered as primary failures. Twelve patients (1.2%) responded to the drugs for a short period ranging from 2 to 4 weeks, and after that the sulfonylurea compounds became rapidly ineffective; these patients were considered secondary failures. Seven hundred eighty-six patients were satisfactorily controlled by the sulfonylurea compounds for periods ranging from 6 to 8 weeks and also for much longer periods. The drugs then became ineffective in 33 (4.2%) of these 786 patients who were considered as genuine late failures. Not a single case of recent diabetes mellitus was observed among these 33 patients; the shortest duration of the disease was 2 years and the longest, 33 years.

No relationship was observed between age and body type of the patient and the incidence of late failure to respond to the sulfonylurea compounds. There was, however, a definite relationship between the incidence of such late failures and the quality

of the control of the carbohydrate metabolism by the sulfonylurea compounds. Of 448 patients who were easily and satisfactorily controlled with the aid of these drugs, 0.6% were late therapeutic failures, as compared with 7% of 280 patients who had shown only a moderate response to the drugs (with an abnormal daily amount of 10 to 20 Gm. of sugar in the urine) and 13% of 120 patients who had been unsatisfactorily controlled with the aid of these drugs (the abnormal daily amount of sugar in the urine varying from 20 to 30 Gm.). In this last group complete failure of response to the sulfonylurea compounds occurred most rapidly. These findings strongly suggest that prolonged therapy with sulfonylurea compounds should be limited to patients with the most favorable response to these drugs.

Late failure to respond to the sulfonylurea compounds is to be considered as a manifestation of the progressive course of the disturbance of metabolism, such as may be observed with similar frequency in other patients who had not been treated with sulfonylurea compounds. The fact that the metabolism can no longer be controlled with the aid of the sulfonylurea compounds is explained by the authors' concept of the mechanism of action of these drugs. According to this concept, the sulfonylurea compounds no longer exert an effect on the carbohydrate metabolism when the production of insulin in the patient's body is cut off to such a degree that a certain required amount of insulin is no longer available. The authors do not share the opinion of other workers that exhaustion of beta-cell activity may be caused by the sulfonylurea compounds.

Two Years' Experience with Viomycin Pantothenate Sulfate (Vionactan) in Treatment of Pulmonary Tuberculosis. G. F. Scalfi, P. Pontiggia and G. Rossa. Minerva med. 49:3343-3356 (Sept. 5) 1958 (In Italian) [Turin, Italy].

An Italian preparation, viomycin pantothenate sulfate (Vionactan), alone or in combination with other antibiotics, was administered to 48 male patients, between 19 and 49 years of age, with pulmonary tuberculosis for a period of 2 to 6 months. Vionactan was administered in a daily dosage of 2 Gm. every 2 or 3 days to 8 patients with chronic disease, who had been previously receiving other antibiotics for at least 2 years. Vionactan and isoniazid in a daily dosage of 5 mg. per kilogram of body weight were administered to the patients at the same time after it had been proved that the tolerance of the patients to Vionactan was good. Vionactan alone was given to another group of 13 patients. The daily dosage consisted of 1 or 2 Gm. of the drug given every other day for a period of 3 to 5 months. The early phases of pulmonary tuberculosis were present in 4 patients. Vionactan brought about radical improvement in 2 patients and marked improvement in 2. [By "radical improvement" is meant a substantial retrogression of the roentgenographic shadows; by "marked improvement" is meant a retrogression of exudative processes and shrinking of cavities.] The chronic phase of the disease was present in 9 patients. Vionactan therapy resulted in slight improvement in 2 patients; there was no change in 2 other patients, and the condition of 2 became worse.

A combination of Vionactan and other antibiotics was given to 35 patients. Twenty patients (including 8 patients of the first group) received orally the combination of Vionactan and isonazid. Slight improvement resulted in 5 patients, marked improvement in 9, and radical improvement in 3; there was no change in 3 patients. The combination of Vionactan and aminosalicylic acid was administered by intravenous infusion to 13 patients. It brought about slight improvement in 2 patients, marked improvement in 5, and radical improvement in 2; there was no change in 4 patients. The combination of Vionactan and streptomycin was given to 2 patients. It resulted in slight improvement in one patient and no change in one. The patients tolerated Vionactan very well. A slight degree of albuminuria developed in all the patients, being the only observed sign of renal reaction to the drug. Headache and vertiginous disorders attributed to the 8th cerebral nerve were noted in 2 patients. Vionactan combined with either isoniazid or aminosalicylic acid gave excellent results in patients in the early phase of pulmonary tuberculosis, who had not previously received or had received only a small amount of other antibiotics. This combination gave good results in patients with chronic disease who had not previously received any chemotherapy, and it gave fair results in those chronically ill patients who had previously received other antibiotics. The authors suggest that Vionactan combined with either isoniazid or aminosalicylic acid can be usefully employed for the treatment of the early phase of pulmonary tuberculosis, or the chronic phase without previous chemotherapeutic treatment, whereas the combination with streptomycin and other antibiotics can be left for succeeding therapeutic management requiring a prolonged maintenance therapy.

Clinical Experiences with the New Broad-Spectrum Antibiotic Reverin Injected by Intravenous Route. K.-F. Albrecht. Chirurg 29:445-448 (Oct.) 1958 (In German) [Berlin].

Reverin is the trade name given to a German preparation, pyrrolidinomethyltetracycline, which was developed by partial synthesis from pure tetracycline. This new tetracycline derivative shows in physiological pH areas a definitely improved solubility as compared with other tetracycline deriva-

tives. The strength of its action and the broadness of spectrum are exactly equivalent to those of tetracycline hydrochloride. At the surgical clinic of the University in Marburg on the Lahn (Germany) this new broad-spectrum antibiotic was given by intravenous route to 174 either hospitalized or ambulatory patients. Some of these patients had inflammatory conditions, such as furunculosis, suppurative bursitis, empyema of joint cavities, osteomyelitis, diabetic gangrene, peritonitis after perforating appendicitis, perforation of stomach, ileus, acute pancreatitis, and pneumonia, or urologic infections (to the exclusion of those caused by Proteus organisms and Pseudomonas aeruginosa). Other patients with paraurethral abscesses, surgically removable sequestrums, phlegmons of the palm, and paronychia received Reverin as an adjuvant to surgical therapy. The drug was also administered in intracranial operations, surgical intervention on pharyngoesophageal diverticula, gastrointestinal resections, cholecystectomy, prostatectomy, mastectomy, recurrent hernia operations, ureteral bougienage, removal of renal and ureteral calculi, cystectomy, and urologic plastic operations, as well as in fractures of the base of the skull, for prophylaxis of infections.

In most of these patients one intravenous injection of 275 mg. of Reverin daily for 4 to 7 days was sufficient for therapeutic and prophylactic purposes. Patients with severe infections or with those caused by pathogenic agents with reduced sensitivity to tetracycline were given 2 daily injections, and occasionally 4 or 5 daily injections were given. One intravenous injection of 5 to 25 mg. per kilogram of body weight proved to be sufficient in children. The satisfactory local tolerance of the drug made it possible to perform the intravenous injection within one minute. The resulting high initial concentration in the serum of the patient is apparently of essential clinical significance. Signs of irritation were not observed in the veins even with repeated injections made into the same blood vessel. No undesirable side-effects were observed except for insignificant sensations of bitter taste on the tongue which occurred in 70% of the patients.

PATHOLOGY

Copper Metabolism in Normal Adults and in Clinically Normal Relatives of Patients with Wilson's Disease. F. C. Neale and M. Fischer-Williams. J. Clin. Path. 11:441-447 (Sept.) 1958 [London].

Increased copper content of the liver, brain, and other tissues, increased urinary excretion of copper, a decreased level of copper in the serum, and an associated decreased level of the copper-containing plasma protein coeruloplasmin are some of the biochemical abnormalities that are found in hepatolenticular degeneration (Wilson's disease). Aminoaciduria, not necessarily accompanied by an abnormal blood level of amino acids, is also found in hepatolenticular degeneration. This familial disease is inherited in a recessive, autosomal way. Biochemical abnormalities have occasionally been reported in clinically normal relatives of patients with hepatolenticular degeneration, namely, an excess aminoaciduria and a low coeruloplasmin level. The authors investigated the serum level and the urinary excretion of copper in 48 clinically unaffected relatives of patients with hepatolenticular degeneration.

The copper values obtained in serum and urine in these 48 persons are reported together with a control study of 106 normal adults. The urinary copper excretion was normal in all the relatives. The mean value for serum copper was found to be 100 mcg. per 100 ml. in normal males and 108 mcg. per 100 ml. in normal females, and this sex difference is statistically significant. Interpreted in the light of these control values, 35 of the 48 relatives had normal serum copper levels. Two child-bearing relatives showed high values. The parents of patients with hepatolenticular degeneration may be biochemically normal or abnormal. Eleven asymptomatic relatives showed low serum copper levels, and 5 of these were undoubtedly abnormal (47 to 70 mcg. per 100 ml.). Since half of these relatives were beyond the age at which hepatolenticular degeneration manifests itself, it may be concluded that some of the unaffected relatives have abnormally low serum copper levels.

Cutaneous Petechiae in Fatal Coronary Artery Disease. L. M. Gerlis. J. Clin. Path. 11:391-395 (Sept.) 1958 [London].

In the clinical recognition of myocardial ischemia, the nature and distribution of the referred pain which frequently accompanies it are of considerable diagnostic importance. Unfortunately in cases of sudden death there may be no such history, and not always is an unequivocal fatal cardiac lesion found, such as a recent or ruptured infarct or an acute occluding lesion of a coronary artery. In some there is little to indicate why or how the patient actually died, as the only cardiac lesions found are of long standing. In 7 autopsies in cases of acute coronary death, cutaneous petechiae were observed at sites commonly associated with referred pain of cardiac origin. No such lesions were observed in any deaths not of coronary origin. These petechiae were all outside the area of cutaneous postmortem hypostasis, and in no case was there any evidence of generalized hemorrhagic disease. It is suggested that this sign may be of diagnostic significance in the postmortem diagnosis of coronary insufficiency.

In the first patient presented, a 72-year-old woman, who died in a collapsed state with dyspnea and pain in the left shoulder 3 weeks after she had ex-

perienced an attack of gripping pain in the retrosternal region, autopsy revealed fine recent petechiae over the deltoid region and in the submammary region on the left side. The heart showed extensive recent infarction. Autopsy on another patient revealed a localized area of fine recent petechiae on the right side of the chest extending as a horizontal band, 7.5 cm. long and 5 cm. wide, just below the right nipple and fading out over the right border of the sternum. In still another patient small recent petechiae were seen over both shoulders and between the shoulder blades.

Two of the 7 patients had been subjected to frequent clinical examinations before death, but in neither case had cutaneous petechiae been noticed, nor have similar lesions been recorded among the clinical manifestations of coronary disease. Although fatal coronary disease is common, these petechiae are rare. Five of the 7 cases were from a personally studied series of 360 deaths due to coronary insufficiency in which a search for petechiae was specifically made, giving an incidence of 1.7%. These cutaneous petechiae may be caused by intense efferent stimuli along a sympathetic nerve pathway similar to that involved in referred pain, possibly by agonal relaxation of blood vessels which had been damaged by prolonged spasm. It is suggested that the presence of such localized petechiae is supporting evidence of acute coronary insufficiency, particularly in those cases in which the coronary arteries themselves show no recent culpable organic lesion. In 4 of the cases hemorrhagic lesions were found in direct relationship to the coronary arteries.

Simplified Technique of Cytodiagnosis in Cancers of the Esophagus: The "Wick" Procedure. C. Debray, J.-P. Hardouin, A. Deporte and E. Martin. Presse méd. **66**:1451-1452 (Sept. 24) 1958 (In French) [Paris].

The somber prognosis of esophageal cancer and the seriousness of the therapeutic measures it requires make it essential to establish the diagnosis by histological study. Esophageal biopsy and cytodiagnosis, the diagnostic methods now in use, have certain disadvantages. Thus, esophageal biopsy often produces negative results, because, for one reason or another, the specimen was not correctly obtained, while cytological diagnosis as usually practiced by lavage of the lesion uses large quantities of fluid requiring special centrifuges and necessitates the examination of a great number of slides. These disadvantages are overcome by a simplified method involving examination of cells deposited by contact on a rough fabric—that of a cotton wick.

The originality of the wick method lies in the manner in which the specimens are obtained. An ordinary oil-lamp wick with a diameter just large enough to fit over a Camus sound is sterilized and fastened in place over the sound, close to the knob, with a few twists of linen thread. The patient, who must be fasting, is given a preliminary injection of promethazine, and the prepared sound is introduced gently, and usually without difficulty, into the esophagus until it reaches the stenosis. The whole procedure is managed under radioscopic control. The sound is then advanced through the stenosed segment with special care to avoid false routes or perforations. Sometimes the passage can be accomplished easily; sometimes the patient must help to carry it out by expedients such as turning or swallowing a little water, or an injection of atropine may be given; sometimes, again, the attempt must be abandoned, because in no case should force be used. When the stenotic area has been cleared, the patient lies down for an hour during which the sound, with its wick, remains in contact with the lesion. It is then withdrawn; the wick is slit lengthwise and laid out flat; and specimens of the adherent film of mucus are removed for study. The material is usually abundant and can easily be analyzed after Papanicolau staining. Several specimens must be taken, however, because the cells found, even in one lesion, will vary according to the area from which they were obtained. Thus, red blood cells will appear predominantly in one slide, inflammatory elements in another, and, finally, cancer cells in a third.

Utilization of this technique produced positive results in 12 of 18 patients with cancer and negative results in 6 with non-neoplastic lesions. The 6 failures were due in 3 cases to failure of the sound to clear the stenotic area—in one, to a technical error by which the cells failed to adhere to the slide; in one, to the fact that the cells were necrotic and could not be analyzed; and, finally, in one, to the fact that the cancer was submucosal and there was no change in the mucosa. The wick procedure was, therefore, successful in 86% of the cases in which the stenotic area was satisfactorily cleared, excluding the one last mentioned in which there were no mucosal changes.

Myocarditis with Endocardial Elastomyofibrosis (EEMF). E. R. Fisher and E. R. Davis. Am. Heart J. **56**:537-552 (Oct.) 1958 [St. Louis].

The authors report on a 23-year-old Korean war veteran with myocarditis associated with severe endocardial elastomyofibrosis who died of cardiac failure about one year after the onset of the heart disease. Laboratory studies revealed a leukocytosis of 20,000 leukocytes per cubic millimeter, with 60% eosinophils, an elevated erythrocyte sedimentation rate, and hypochromic anemia. Ancylostoma and Ascaris ova were identified by stool examination, and a Trichinella skin test was positive on one occasion. There was a slight elevation of temperature to 100 F (37.8 C). In the earlier part of the patient's

illness electrocardiograms revealed nonspecific changes of T wave and QRS complex suggestive of pericarditis, but roentgenograms of the chest appeared normal. Electrocardiograms obtained before the patient's death revealed right axis deviation and digitalis effect, and chest roentgenograms obtained at this time showed marked cardiac enlargement and pulmonary congestion. The patient failed to respond to diuretics, digitalis, and supportive measures, and bilateral superficial venous femoral ligation did not alter the ingravescent course.

Autopsy showed that the entire endocardial surface of the inflow tract of the left ventricle, including two-thirds of this chamber, was thickened. The most caudal portion appeared greenish-gray and rugose. The papillary muscles were indistinct in the area of endocardial thickening. The entire circumference of the inflow tract of the right ventricle was also thickened. A circular defect was observed in the muscular portion of the interventricular septum. Marked luminal narrowing due to atherosclerosis was focally evident in both coronary arteries. Microscopic examination revealed focal interstitial myocardial fibrosis in many areas, particularly about the vessels. Interstitial inflammatory infiltrates, comprised principally of eosinophils, were not infrequent. Sections at the inflow tract of the left ventricle revealed superficial fibrinous layers subtended by collagen and numerous dilated vascular channels. Sections observed from the foci of endocardial thickening in the right and the left ventricle revealed much elastic tissue hyperplasia. Sections of the coronary arteries revealed the lumens to be eccentric due to marked intimal fibrosis and collections of foam cells and cholesterol clefts.

The clinical course and the anatomic features of the patient closely paralleled those described in that form of heart disease most frequently, but not exclusively, observed in Africa and designated by other workers as endomyocardial fibrosis or Löffler's endocarditis fibroplastica parietalis. In addition, severe atherosclerosis of the coronary arteries was present; this latter condition is considered to be pathogenetically, but not etiologically, related to the observed cardiac alterations. The patient's clinical history, infestation with Ascaris, Ancylostoma, and possibly Trichinella organisms, as well as the findings of blood eosinophilia and eosinophilic myocarditis, are considered strongly suggestive of the parasitic nature of the myocarditis, despite the failure to demonstrate such organisms within the heart. Although it is recognized that various causal factors may contribute to this type of heart disease, it is proposed that parasitic myocarditis may be more frequent in this regard than was previously appreciated, particularly in patients with eosinophilia. The primacy of myocardial damage in producing the endocardial alteration observed is emphasized, and the latter is attributed to both reparative and mechanical phenomena. The relationship of this apparently singular group of rare cardiac disorders to some recorded cases of idiopathic cardiomegaly and adult forms of so-called congenital fibroelastosis remains to be demonstrated.

Observations Concerning the Pathogenesis of Endocardial Thickening in the Adult Heart. E. R. Fisher and E. R. Davis. Am. Heart J. 56:553-561 (Oct.) 1958 [St. Louis].

The authors report autopsy findings on the hearts of 109 unselected men, between the ages of 26 and 90 years, who died of various diseases. Varying degrees of endocardial thickening were observed in 66 of the 109 hearts: it was considered mild in 37, moderate in 23, and severe in 6 (the condition was not found in 43 hearts); and it was 6 times more frequent in the left than in the right ventricle. Microscopic examination revealed 2 types of endocardial thickening. The type considered as reparative was characterized by fibrosis with little or no proliferation of elastic tissue or smooth muscle; it was observed most frequently in association with major and minor myocardial infarction and the organization of mural thrombus. The compensatory or mechanical type appeared as a hypertrophy of smooth muscle and hyperplasia of the endocardial elastic fibers; the latter finding prompted the authors to designate this type of endocardial thickening as "endocardial elastomyofibrosis (EEMF)". Severe degrees of myocardial fibrosis appeared more closely related to cardiac hypertrophy and dilatation than to the age of the patient or to other factors investigated.

Endocardial elastomyofibrosis was most frequently observed in the outflow tract of the left ventricle; severe forms were observed with equal frequency at this site, as well as throughout this chamber. Since there was little indication that mild degrees of endocardial elastomyofibrosis were related to cardiac hypertrophy and dilatation, it is suggested that the latter may only accentuate this phenomenon. Other factors, such as the anatomic structure of the inflow tract and the "trauma" of ejected systolic blood, appear tenable as playing some part in the occurrence of endocardial thickening at this site.

PHYSIOLOGY

The Individuality of Nuclear Chromatin with Particular Reference to Polymorphonuclear Neutrophil Leukocytes. D. K. Briggs. Blood 13:986-1000 (Oct.) 1958 [New York].

The essence of the sexual dimorphism of leukocytes is the presence or absence of drumsticks. These are stalked, rounded appendages of chro-

matin, 1.5 μ in diameter, projecting from the nuclei of the leukocytes of female subjects only. By counting the number of cells bearing the drumstick, it has been possible not only to divide patients into male and female but also to divide females into groups in terms of their drumstick counts. During the original investigation of chromatin sex in normal and abnormal individuals, it was found that the number of drumsticks possessed by different female subjects was widely variable. In order to derive some idea of the normal range of the drumstick count, studies were made on 100 student nurses. Their ages ranged from 18 to 30 years. The slides were made at the same time as blood was taken for hemoglobin measurement.

There are difficulties inherent in any method that attempts to enumerate the number of drumsticks per 500 leukocytes. It has been said that the drumstick is found on the nucleus of the mature leukocyte, but since it is difficult to decide at what point a leukocyte reaches maturity, all neutrophils including stab forms and juveniles were counted. This produced an unusually low drumstick count in comparison with what would have been obtained if the less mature forms had not been included. Another difficulty arises from uncertainties in recognizing a drumstick. The classical drumstick with its rounded head and narrow stem is never the source of error, but an appendage may be disguised when it lies close to the main body of the nucleus, has a short neck, or is otherwise deformed. Nevertheless, there was a high degree of reproducibility of counts made by different observers on the same blood smear or by the same observer on different occasions. The lowest counts amounted to 1 drumstick per 500 cells and the highest, 29 drumsticks per 500 cells. In order to determine how much this variation was due to the intrinsic error of the counting method and how much to individual conditions prevailing in each woman at the time of the examination, the counts were repeated for the 5 women showing the fewest drumsticks and the 5 showing the greatest number. In order to determine how much the drumstick counts were dependent upon factors operative at a particular time, all 10 women were recalled 6 months after the first examination, and further smears were made.

Later an attempt was made to determine what it was that distinguished the women who fell into the low drumstick count category from those in the high. The women were interviewed and their medical histories reviewed. They were assessed from various standpoints, such as age, racial background, and physical development. The author was unable to find any other single factor which was consistently different between the 2 groups. It is reasonable to suppose that the drumstick count, like a person's height or weight, is the product of many interrelated factors. If the 2 groups of women differ qualitatively from one another, then this distinction is as obscure as any clinical distinction which may exist between women of blood group A and those of group B. None has yet been found. In the case of blood groups, hereditary factors are of importance. The author is now investigating the drumstick counts of the mothers and sisters of some of the women who had persistently high or low drumstick counts.

Sex Differences in Plasma Fibrin, Fibrinolytic Capacity and Lipids as Influenced by Ingested Fat, Gonadectomy and Hormone Implants: Possible Implications for Pathogenesis of Coronary Occlusion. T. Gillman, S. S. Naidoo and M. Hathorn. Clin. Sc. 17:393-408 (Aug.) 1958 [London].

The plasma fibrin and fibrinolytic activity, chylomicronemia, and blood lipids were studied intact, gonadectomized and hormone-treated gonadectomized male and female rats under basal conditions and 3 hours after a standard fat meal. Some preliminary findings in calciferol-treated rats are also reported. Basal blood lipids were almost identical in normal and gonadectomized rats; after fat ingestion the highest values were noted in male castrates. In male rats more marked chylomicronemia was found to develop than in females, at comparable total blood lipid values. This response to fat ingestion was shown to be influenced both by gonadectomy and by implanting testosterone or estradiol pellets into gonadectomized males and females. It is suggested that this greater chylomicronemia in male rats and in some of the hormone-treated gonadectomized rats may perhaps be due to differences in the mechanisms for clearing particulate lipid from the circulation and especially of reticuloendothelial activity in this regard. Basal fibrin levels were greater in intact males than females. Gonadectomy was followed by significant elevation of basal fibrin in females but not in males. Fat ingestion resulted in increases in plasma fibrin levels in most groups of rats here studied. Estradiol and testosterone pellet implantations were followed by elevations in plasma fibrin levels in gonadectomized males and females. The rise was particularly marked in testosterone-treated male castrates.

While plasma fibrinolytic activity was not found to differ significantly in male and female rats under basal conditions, it was noted that both fat ingestion and castration were followed by significant falls in males. Hormone implantation was followed by small changes in male castrates, but in spayed females testosterone produced considerable elevations, while estradiol decreased basal plasma fibrinolytic activity. Preliminary studies in rats with vascular and other injuries induced by toxic doses of calciferol showed that this treatment was followed by increases in basal plasma fibrin in intact

males and especially in castrates, with little or no change in testosterone-treated castrates. The fibrinolytic activity in the latter rats and in intact males was unchanged, while in untreated castrates the values fell almost to zero.

In commenting on possible implications of these findings, the authors suggest that the observation that fibrinolytic activity is lowered after the ingestion of fat is in keeping with the widely recognized high incidence of coronary occlusion among people with a high dietary fat intake. Studies of plasma fibrin and fibrinolytic activity, and their modification by sex hormones and dietary fat, are indicated in patients with coronary occlusive disease. If findings similar to those reported in rats are elicited in such patients, then the theory outlined elsewhere as to the possible interrelations of several factors (including vascular injury and repair, chylomicron clumping, blood sludging and coagulability as affected by sex and fat intake as well as reticuloendothelial activity) in the pathogenesis of coronary pathology, on the one hand, and of occlusive episodes, on the other, may provide a new and heuristically valuable approach in elucidating the etiology, prophylaxis, and perhaps even the treatment of coronary occlusive disease in man.

PUBLIC HEALTH

A Widespread Epidemic of Typhoid Fever Traced to a Common Exposure. W. A. Neill, J. D. Martin, E. A. Belden and W. Y. Trotter. New England J. Med. **259**:667-672 (Oct. 2) 1958 [Boston].

A widespread typhoid epidemic resulted from common exposure of the participants in a religious conference at MonArk Springs, Mo., in July, 1956. From field work done by local, state, and Public Health Service investigators, complete records were obtained on 373 of 405 known attendants from Missouri and Oklahoma (75% of the total attendance) and all patients with typhoid. Two-thirds of these persons experienced one or more intestinal illnesses during or shortly after the camp meeting. A sharp outbreak of diarrhea occurred during the first few days of the meeting. Illnesses continued to occur in smaller numbers throughout the meeting and for the next 4 or 5 weeks.

This typhoid epidemic is the most geographically widespread typhoid outbreak reported in the United States in which the source of infection has been traced by bacteriophage typing to the responsible carrier. Thirty-four cases of typhoid (one fatal) were discovered in 8 states. Seventeen of the 20 cases with positive culture were traced to the carrier of the same rare type of typhoid bacillus. During the 4 years previous to the MonArk Springs outbreak, this type (phage C-2) had been found in only 10 of 4,601 cases phage-typed in the United States. In addition to typhoid 2 diarrheal illnesses, distinguishable on the basis of incubation periods, were observed. The etiological agents were not discovered. Well water contaminated by the campers' sewage was the principal means of transmission of typhoid and diarrhea.

Asian Influenza Vaccine: Effect of Age and Schedule of Vaccination upon Antigenic Response. G. M. Bayne, O. C. Liu and W. P. Boger. Am. J. M. Sc. **236**:290-299 (Sept.) 1958 [Philadelphia].

Experience with other types of influenza has indicated that a 200 chick cell agglutinating (CCA) unit dose of vaccine, when given to a population without prior experience with the antigen, results in a relatively poor initial antibody response. This primary experience with the antigen may, however, make possible an adequate booster response to a second dose of vaccine given several months later. There was no information available to indicate that the optimal schedule for vaccination with the new monovalent 200 CCA unit Asian influenza vaccine was the same as that established for other strains. The studies described attempted to assess (1) the effect of a single-dose primary immunization upon antibody titer, (2) the effect of a 2-dose primary immunization upon antibody titer, (3) the efficacy of 1.0 ml. administered subcutaneously, compared with 0.1 ml. intracutaneously, in eliciting an antibody response, and (4) the effect of the age of the recipient upon the antibody response to vaccination.

The authors present data from a study of 312 persons relative to their antibody response to vaccination with a monovalent Asian influenza vaccine. These persons, as well as an additional 250 persons on a hospital staff who received this same lot of vaccine, were followed as regards side-effects. Less than 3% of these individuals exhibited significant local or systemic side-effects. Individuals over the age of 40 years, as a group, had a better response to a single-dose vaccination than did persons under the age of 40. A 2-dose immunization with a 4-week interval between doses was superior to either a single dose or 2 doses 2 weeks apart when a 200 CCA unit monovalent vaccine was employed. The intracutaneous route of inoculation was inferior to the subcutaneous route when the vaccine was given as a single injection to individuals without prior experience with the antigen. However, when it was administered as the second dose of a 2-dose immunization schedule with a 4-week interval, the intracutaneous and subcutaneous routes gave comparable responses. The availability of the Asian strain for incorporation into a polyvalent vaccine makes possible a considerably broader scope of protection against epidemic influenza.

BOOK REVIEWS

Physiological Bases of Psychiatry. Compiled and edited by W. Horsley Gantt, M.D. Part I from Pavlovian Laboratory, Johns Hopkins University, Baltimore. Director, W. Horsley Gantt. Part II from Behavior Laboratory, Cornell University, Ithaca, New York. Director, Howard S. Liddell. Publication number 323, American Lecture Series, monograph in Bannerstone Division of American Lectures in Objective Psychiatry. Edited by W. Horsley Gantt, M.D. Cloth. $10.50. Pp. 344, with illustrations. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill.; Blackwell Scientific Publications, Ltd., 24-25 Broad St., Oxford, England; Ryerson Press, 299 Queen St., W., Toronto 2B, Canada, 1958.

In May, 1955, at the 25th anniversary meeting of the Pavlovian Laboratory, headed and directed by W. Horsley Gantt, a series of papers was presented. At this meeting the Pavlovian Society was founded, and two years later held another meeting at the Behavioral Laboratory of Cornell University, directed by Howard S. Liddell. Both editors of this book are pioneers in the study of the Pavlovian concepts of conditioning in the United States. In Gantt's laboratory in the last 25 years about 300 papers have been published, all of which are listed in the back of this book under appropriate general headings. The book contains an adequate index to the published papers presented at the meeting. Some of these are old and are simply republished and others contain the data and conclusions from recent work. Not all of the papers presented at the 1957 meeting at Cornell are published in this volume, but it is anticipated that the rest will be contained in a subsequent book. The papers contained are not a summary of all of the physiological bases of psychiatry, much less all concerned with the problems of conditioning, so that the general title of the monograph is somewhat grandiose. Unfortunately the publisher took three and a half years after the presentation of the symposium to produce this work, and even the papers representing more recent work are already somewhat outmoded.

All in all, the book is a curious mixture containing introductory remarks by John Whitehorn, musings by Gantt, poetic fancies by Dos Passos, and a lengthy, redundant, highly speculative paper by Kempf. The general reader would gain little from this book that he could not obtain by following the literature. As a monument to Gantt's consistent work over the last 25 years and as a record of the beginning of the Pavlovian Society, it should be gratifying to the pioneers in research on conditioned reflexes.

These book reviews have been prepared by competent authorities but do not represent the opinions of any medical or other organization unless specifically so stated.

Head Injuries: Mechanisms, Diagnosis and Management. By E.S. Gurdjian, M.D., Professor of Neurological Surgery and Chairman of Department of Neurosurgery, Wayne State University College of Medicine, Detroit, and J. E. Webster, M.D., Associate Professor of Neurological Surgery, Wayne State University College of Medicine. Cloth. $14. Pp. 482, with 108 illustrations. Little, Brown & Company, 34 Beacon St., Boston 6; J. & A. Churchill, Ltd., 104 Gloucester Place, Portman Sq., London, W. 1, England, 1958.

This book reflects the extensive clinical, neurosurgical, and experimental experience of two neurosurgeons. It is well written and complete. The results of the study on mechanisms of injury and the interpretation of the results of the damage are particularly interesting. Diagnostic techniques are given in detail. The clinical manifestations are carefully portrayed. Complications and sequelae each occupy a complete chapter and a separate chapter is devoted to head injuries in infants and children. Both surgical and nonsurgical management are completely covered. This book should be available to every physician who treats head injuries.

The Practice of Nuclear Medicine. By William H. Blahd, M.D., Chief, Radioisotope Service, Veterans Administration Center, Los Angeles, Franz K. Bauer, M.D., Chief, Outpatient Service, Los Angeles County Hospital, and Benedict Cassen, Ph.D., Chief, Medical Physics Section, Atomic Energy Project and Clinical Professor of Biophysics, University of California at Los Angeles School of Medicine. Introduction by Paul Aebersold, Ph.D., Assistant Director for Isotopes and Radiation, Division of Civilian Application, United States Atomic Energy Commission, Washington, D. C. Foreword by Joseph F. Ross, M.D., Associate Dean, Professor of Medicine and Radiology, School of Medicine, University of California at Los Angeles. Cloth. $12.50. Pp. 407, with 112 illustrations. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill.; Blackwell Scientific Publications, Ltd., 24-25 Broad St., Oxford, England; Ryerson Press, 299 Queen St., W., Toronto 2B, Canada, 1958.

This work is divided into four parts which deal with physical principles underlying nuclear medicine, diagnostic methods involving the use of radioactive isotopes, therapeutic applications, and considerations of laboratory instrumentation and procedure. The first part contains instructive material that is likely to be new even to readers already familiar with the older literature of radiology. It includes a brief treatment of the intricate problems of dosimetry of the ionizing radiations. The second part begins with a detailed discussion of the use of iodine-131 in detecting abnormalities of form and function of the thyroid gland, and it continues with the various techniques used in localizing tumors, studying the gastrointestinal absorption of fats and proteins, testing the functions

of liver and gallbladder, detecting gastrointestinal hemorrhage by means of erythrocytes labeled with chromium-51, and recognizing abnormalities of cardiovascular and renal function. Three chapters are devoted especially to determinations of blood volume, the diagnosis of hematological disease, and the study of body composition by isotope dilution methods. The third part, on therapeutic applications, takes up the treatment of hyperthyroidism, euthyroid cardiac disease, and thyroid cancer with iodine-131, the treatment of hematological and malignant diseases with phosphorus-32, and the treatment of neoplastic disease with radiocolloids and with radiation from various internal and external sources. The last part is well supplied with floor plans, photographs of apparatus, tabular information, and other practical material of use in planning and operating a nuclear medicine laboratory. The book is commendable for the bibliographies at the end of each chapter and for a good index. It should be valuable as a reference work to students and specialists in radiology but should also interest any physician who wishes to see a panorama of nuclear medicine in its present state of development.

The Family Handbook of Home Nursing and Medical Care. By I. J. Rossman, M.D., Ph.D., Chief of Professional Services, Home Care Department, Montefiore Hospital, New York, and Doris R. Schwartz, R.N., Assistant Professor in Outpatient Nursing, Cornell University-New York Hospital School of Nursing, New York. Cloth. $4.95. Pp. 403, with illustrations. Random House, Inc., 457 Madison Ave., New York 22; Random House of Canada, Ltd., 1149 King St., W., Toronto 3, Canada, 1958.

A mine of valuable information, this volume is one of the more readable popular treatises on what one can do at home both to prevent and to care for illness. The authors emphasize the need for medical care and in great detail point out how to know when some member of the family needs a physician's services, how to locate a suitable physician, what to expect from the physician, and what the physician expects from both the patient and his family. Recognizing that most illnesses are cared for at home for all or part of their duration, the authors place special emphasis on the peculiar needs of each age group. An alphabetized appendix briefly describes home nursing techniques needed in the care of both bedridden and partially ambulant patients, suggests ways to make the nursing duties less exhausting, and indicates procedures on which the home nurse should receive instruction from the physician or the public health nurse. A particularly valuable part of this book is a simple, unemotional, and practical discussion of several major medical problems. These supplement the information the physician might give and stimulate questions for him to answer. Among these problems are infectious diseases, rheumatic heart disease, high blood pressure, heart attack, heart failure, stroke, arteriosclerosis and senility, ulcer, diabetes, arthritis, tuberculosis, mental illness, cancer, and diseases of the nervous system.

The practical approach to typical problems, the sincerity of the discussions on major illnesses, the forthright discussions of patient-physician relationships, and the absence of the usual "doctor book" flavor suggest this as an excellent book for physicians to recommend to families with children or persons chronically ill.

Eye Surgery. By H. B. Stallard, M.B.E., M.A., M.D., Surgeon, Moorfields Eye Hospital, London. Third edition. Cloth. $18. Pp. 899, with 671 illustrations. Williams & Wilkins Company, 428 E. Preston St., Baltimore 2; John Wright & Sons, Ltd., 42-44 Triangle West, Bristol 8, England, 1958.

The primary purpose of this new edition is to describe in detail surgical operative procedures which have been accepted in current practice. The chapters on anesthesia, corneal transplantation, the effect of radioactive disks in the treatment of intraocular neoplasms, and buried orbital implants have been extensively revised. Many of the older and classical plastic procedures, especially around the lids, have become obsolete and have been eliminated. Dr. Stallard is explicit in discussing many of the operations and gives his personal comments on those he prefers. A case in point is the anterior flap sclerotomy with basal iridencleisis selected by him as an effective operation for chronic glaucoma and relatively free from some of the unpleasant postoperative complications of some of the other operations used in the treatment of glaucoma. A unique feature of the book is the fact that the author has made all of his own drawings. Although on the whole they serve their purpose very well, some of them should have been larger and more explicit. This book should serve as an excellent reference work, particularly for younger ophthalmic surgeons.

Autopsy Diagnosis and Technic. By Otto Saphir, M.D., Pathologist, Michael Reese Hospital, Chicago. Foreword by Ludvig Hektoen, M.D. Fourth edition. Cloth. $8.50. Pp. 549, with 80 illustrations. Paul B. Hoeber, Inc. (medical book department of Harper & Brothers), 49 E. 33rd St., New York 16, 1958.

This book has become the standard American textbook on autopsy technique. It is, therefore, not surprising that a fourth edition has come out with some valuable additions. A few illustrations and comments have been added to various chapters, and the problem of unexpected deaths and legal examination receives more emphasis. The technique of autopsy of bodies containing radioactive isotopes is discussed, as well as autopsy tissue banking techniques. The new chapter on do's and don'ts gives evidence of the great experience of the author. The historical introduction by Dr. Sidney Farber is a pleasure to read. This book is well illustrated and well written.

QUESTIONS AND ANSWERS

SMALLPOX VACCINATION

TO THE EDITOR:—*The parents of a youngster have asked for an exemption from smallpox vaccination because of a severe reaction alleged to have occurred after a vaccination in September, 1952. The child has a history of a first vaccination in May, 1949, a second in September or October, 1949, a third in September, 1950, and the fourth in September, 1952. He has never had a "take." Four or five days after the last vaccination, he became ill with a high temperature, vomiting, and complaints of pain in the arm and shoulder. He had no headaches. It was advised never to let the child be vaccinated again, but the family has no written request of this type. Could the child have had a reaction due to vaccination and not have had a take? Would it be dangerous to vaccinate again?*

I. P. Barrett, M.D., Fort Worth, Texas.

ANSWER.—Complications after smallpox vaccination are mainly of the cutaneous type (pyogenic infection, eczema vaccinatum, or generalized vaccinia) or, far more rare, postvaccinal encephalomyelitis. They usually occur between 7 and 14 days after vaccination, and for their occurrence multiplication of the virus, i. e., a successful take, appears to be essential. In the particular instance to which the question refers, it is this consultant's opinion that the illness suffered by the youngster four days after vaccination was coincidental, since none of the symptoms of the above-mentioned complications were present. Consequently, there does not seem to be any reason for not vaccinating this youngster again. It is noted that repeated vaccination attempts have failed in this boy. Cases of smallpox have occurred in individuals in similar circumstances, meaning that failures to develop a primary take do not indicate immunity but are due to faulty vaccination techniques or to the use of vaccines which have lost their original potency because of improper or prolonged storage.

BACTERIAL HAPTENES

TO THE EDITOR:—*What is a bacterial haptene? What does it mean to "couple" a bacterial haptene to live cells? Any detailed information will be appreciated.* *M.D., Illinois.*

ANSWER.—The term haptene was first used by Landsteiner in 1921 to denote substances which are incapable of stimulating antibody formation but which, when combined with a carrier molecule (e. g., a protein), will evoke antibodies and will impart specificity to them. The antibodies produced in this fashion will then be capable of reacting with the haptenes in some measurable way. It is now known that some of the complex haptenes can themselves induce antibody formation when injected intradermally or subcutaneously into certain animals. The bacterial haptenes are such haptenic substances occurring as components of many species of bacteria. The soluble specific substances present in the capsules of pneumococci are good examples of bacterial haptenes; they account for the type specificity of these organisms. Coupling means that the haptene is linked to a living cell by such means that the cell is not killed; the haptene serves to modify the immunological properties of the cell.

NEUTRON CAPTURE THERAPY

TO THE EDITOR:—*A patient, aged 42, has proved primary adenocarcinoma of the liver, and, as it involves most of the liver, it is inoperable. Is it possible that neutron capture therapy could be of value in such a case? If it offers any benefit, how and where could he receive such treatment?*

J. B. Eviston, M.D., Huntington, Ind.

ANSWER.—Neutron capture therapy, as first reported by Farr and others (*Am. J. Roentgenol.* 71:279, 1954), is an experimental exploration of the possibilities of utilizing prompt, induced atomic disintegration to selectively destroy and thereby to control malignancy. Two components, one a target atom (thus far boron) and the other a thermal neutron derived from a nuclear reactor, interact with immediate disintegration of the boron atom into an alpha particle and an energetic lithium particle with both particles delivering up all their very considerable energy (2.4 mev) within a tissue volume approximately that of one cell. Selectivity is achieved by placement of the target atom through knowledge of its rate of distribution throughout the malignancy and the normal adjacent structures. With these data it is possible to utilize a neutron bath to flood the anatomic region with one component of the interacting couple (thermal neutrons), since the other component (boron-10) is chiefly distributed through the tissue to be destroyed during the time of neutron exposure. This procedure eliminates many problems of geometry inherent in external beam therapy. Since the specificity is achieved through proper utilization of time intervals after intravascular injection and vascular system distribution, the rates and magnitude of accumulation between malignant structures and surrounding

The answers here published have been prepared by competent authorities. They do not, however, represent the opinions of any medical or other organization unless specifically so stated in the reply. Anonymous communications cannot be answered. Every letter must contain the writer's name and address, but these will be omitted on request.

normal structures must be different enough to permit exposure to a requisite number of neutrons during this "safe" time interval. The presumed retarding effect of the blood-brain barrier made it possible to explore this procedure in relationship to glioblastoma multiforme by the Medical Department of Brookhaven National Laboratory. No patients have been cured, but results have been technically encouraging to the point of designing and now assembling a reactor specifically for medical purposes at Brookhaven and incorporation of a medical port facility in the new Massachusetts Institute of Technology reactor. While in principle the procedure might be useful in deep-seated malignancies in other organs of the body not otherwise susceptible to control, as yet technical difficulties have precluded exploration of any but the aforementioned brain tumor. Patients are considered for admission to Brookhaven National Laboratory Hospital by physician referral only. After extensive documentation and tissue specimens furnished by the referring physician have been studied by the Brookhaven National Laboratory staff to ensure appropriate patient qualification, the referring physician is advised of the decision regarding his patient. After treatment the patient is generally returned to the care of the referring physician.

PROPHYLACTIC SURGERY IN CANCER

To the Editor:—*Four sisters have died from metastasis of breast cancer within less than five years after radical mastectomy. All the lesions were found early. Their ages were 45 to 55 years at the time of death. There are three remaining sisters, aged 38 to 42 years. Would it be justifiable for these three sisters to have prophylactic bilateral simple mastectomy?*

Harold L. Bock, M.D., Stronghurst, Ill.

Answer.—The question posed of prophylactic surgery to avoid cancer in the presence of high familial incidence or of other seemingly predisposing factors has been frequently debated. Such a practice is not a generally accepted procedure. Although there is an occasional family in which all the sisters develop mammary cancer (this consultant knows of one such instance), it is quite a rare occurrence. Mastectomy is psychologically a traumatic experience. Its use on a prophylactic basis seems a little drastic. It might be pointed out that individuals who suffer from one cancer are more likely to develop another tumor than are members of the nontumorous population. A prophylactic mastectomy would not prevent the appearance of a tumor in another primary site. It is hoped that some of the new developments in oncology, such as the use of chemotherapy at operation as well as in the treatment of recurrent disease, will improve the prognosis for mammary and other tumors. Perhaps the living sisters need not suffer the same fate as the dead sisters even if they should be so unfortunate as to develop mammary cancer.

MUSCLE TIGHTNESS AND STRESS

To the Editor:—*With some variations, the following set of symptoms are rather often seen in this locality: aching of many muscles, with some soreness and tenderness on palpation or motion; joint pains; and more or less malaise. Physical examination usually shows normal findings. Occasionally, roentgenograms show a few arthritic spurs on some vertebral or other articular surfaces. Such patients are most often men of early middle age, although both sexes are affected; probably the most severely affected patient so far seen has been a farmer about 37 or 38 years of age. Cool wet weather makes the condition worse, and relief can usually be obtained temporarily by a trip to a different climate—almost any different climate. Perhaps the relief is obtained because of the incidental vacation from work and environment. Please comment.* *M.D., Illinois.*

Answer.—It seems likely that the patients described are suffering from the pain of muscle tightness brought on as a part of the bodily expression of emotional tension. The fact that freedom from responsibility, irrespective of climate, offers consistent relief to these patients would strengthen this inference. It is not widely appreciated that voluntary skeletal muscles may become involuntarily tense and display sustained contraction without the patient being aware of any increase in the contractural state of the muscles. Sustained contraction associated with a decrease in muscle blood flow has been shown to be productive of muscle pains and soreness in the muscles of the head, back, and extremities. It is not likely that the arthritic spurs have anything to do with the pain mechanism. The most effective treatment has been the one mentioned, that is, taking a breather with freedom from responsibility for a time. Reassurance and emotional support from the physician are also often helpful.

ANIMAL JAUNDICE AND INFECTIVITY OF MAN

To the Editor:—*What is the present conception of jaundice in animals? Is there a type of jaundice which is contagious to men? Is this type caused by virus and, if so, what kind of virus? It seems that there is a difference of opinion among veterinarians.* *M.D., Pennsylvania.*

Answer.—Animal jaundice may be caused by a number of infectious agents, as well as chemicals and poisonous agents. The question presumably refers only to the infectious types of jaundice or hepatitis which are caused by viruses, bacteria, protozoa, and helminths. The most common viral hepatitis is infectious canine hepatitis caused by Rubarth's virus. It has been described in all members of the canidae family and occurs widely in Europe, North America, and Australia—undoubtedly in most places where there is a sizable dog population. The virus of canine infectious hepatitis

is spread by direct contact among dogs. It is not infective for man. Other animals in addition to dogs are susceptible to viral hepatitis. The most important of these diseases is Rift Valley fever or infectious enzootic hepatitis of sheep and cattle. The disease was first described as appearing in British East Africa but now has appeared in Central and South Africa. It is highly contagious to man. It is spread to man by the handling of infected animals and their tissues. Mosquitoes may also transmit infection. The disease is almost never fatal in man. It resembles influenza or dengue. A viral hepatitis has been described in ducks in northern United States and England. This virus affects only young ducklings. No signs of disease appear in adult birds, although they are known to harbor the virus. A similar disease but unrelated antigenically has been described in chickens. The avian hepatitis is reported to be caused by a viral agent. Neither the duck's disease nor avian hepatitis virus are pathogenic for man. Leptospira infections are the most important bacterial cause of jaundice in animals. All domestic animals are susceptible to leptospirosis, as well as many rodents and wild animals. Most of these infections are communicable to man. Jaundice usually occurs with the rat type (caused by Lept. icterohaemorrhagiae) in man. The other animal Leptospira infections are usually characterized by meningitis in man. Other bacteria, as well as protozoa and helminths, may produce jaundice in animals, but these are usually the result of liver damage or blockage of bile ducts. Some of these agents may be communicable to man.

COLOR OF FRESHLY DRAWN BLOOD

To the Editor:—*Venous blood, drawn from a wide variety of persons, shows a rather wide range of color variation from near arterial red to a very dark red or near "black," as it will ordinarily be called. A tourniquet is always used to obtain the engorgement of the veins necessary to obtain the blood. The bright red venous blood has been obtained from children and the older the children the darker the blood; among adults, bright red blood is a rarity limited to a few muscular men of unusual vitality. While dark venous blood has always been observed in sickly adults, it has also been found in young adults without any obvious signs and symptoms of illness. Do these findings have any diagnostic significance?*

R. J. Kent, M.D., Savannah, N. Y.

Answer.—It is doubted that the color of freshly drawn venous blood has diagnostic significance. There are several factors which will influence the color of the blood: Anoxia due to inadequate aeration of the blood in the lung, heart failure, arteriovenous shunt, stasis, or prolonged constriction of the arm by the tourniquet will result in "dark blood" being withdrawn. A high hematocrit value will have the same effect. On the other hand, a low hematocrit value, high cardiac output without failure due to nervousness or thyrotoxicosis, drawing blood immediately after the placement of the tourniquet, or air in the syringe will yield "red" or "light" blood.

SALT INTAKE DURING PREGNANCY

To the Editor:—*An article by Robinson* (Lancet 1:178, 1958) *reports the administration of diets high in salt content to prevent or relieve most of the toxic phenomena of pregnancy, including early toxemia. The incidence of edema, perinatal death, and hemorrhage during and after pregnancy was recorded as lower in women taking extra salt. Is this not totally contrary to what has been the procedure, i.e., always to restrict the sodium or salt intake completely?*

Nat Kanner, M.D., Brooklyn, N. Y.

Answer.—Greenhill (Year Book of Obstetrics and Gynecology, 1957-1958, Chicago, Year Book Publishers, Inc., 1958, pp. 127-129) has commented that the article by Robinson is both disturbing and revolutionary "because most obstetricians throughout the world are afraid to use extra amounts of salt in pregnancy. In fact, most perfectly normal women in pregnancy are told to curtail salt ingestion. Certainly those who have any increase in blood pressure, proteinuria and edema are told to limit their intake. Now we are informed that extra salt in the diet seems to be essential for a healthy, pregnant woman and her baby. Many obstetricians, notably Dieckmann, have emphasized the dangers of salt during pregnancy. The following significant statements are from Dieckmann's book 'The Toxemias of Pregnancy' (ed. 2, St. Louis, C. V. Mosby Company, 1952, pp. 346-348): 'Excessive amounts of parenterally injected sodium chloride solution will produce edema, hypertension convulsions and coma in animals and human beings. . . . Several investigators state that some hypertensive patients placed on a low-sodium diet respond with a significant fall in blood pressure and the decrease is abolished by giving sodium chloride. . . . What was of greater interest to us was the increase in proteinuria which occurred in patients with pre-eclampsia after several injections of sodium chloride solution. . . . There would be as much as a 600 per cent increase within 24 to 48 hours and it would persist long after delivery.' Dieckmann also said (p. 353), 'It was surprising to note that of the patients who had been referred to the toxemia clinic because of hypertension, edema, proteinuria, or too rapid weight gain, 63 per cent showed no edema or no change in the degree of edema after the administration of sodium chloride or sodium bicarbonate. We were still more surprised when 12 per cent of the patients who had edema showed a decrease after the administration of sodium salt. It is noteworthy that of the 104 patients who received sodium salts, 31 per cent had no edema, 32 per cent had no change in the degree, 25 per cent had an increase of edema, and 12 per

cent a decrease in edema. These were all presumably abnormal patients that had been referred to the toxemia clinic, and yet in only 25 per cent was there a presumable association with sodium salts.'" Surely the relationship of salt intake to pregnancy, and particularly to the toxemias, requires elucidation.

NUTRITION FOR A PATIENT WITH TWENTY CENTIMETERS OF JEJUNUM

To the Editor:—*A patient underwent an extensive intestinal resection for regional ileitis. According to the operation records, only 20 cm. of small intestine was left below the ligament of Treitz, which was then anastomosed to the descending colon. The distal portion of the descending colon was brought out as a colostomy. This patient must maintain nutrition by absorption through the stomach, duodenum, 20 cm. of jejunum, and a short segment of descending colon. He has managed to keep alive for the past four years by feedings every few hours, made possible by the full-time attention of his mother. During this time, his nutritional state has gradually become worse, and he has been frequently hospitalized for blood transfusions. The hemoglobin level is 4 Gm. per 100 cc. and the red blood cell count a little over one million per cubic millimeter. Most of the food material comes through the colostomy unabsorbed. Can you give any suggestions as to feeding this patient?* *M.D., Louisiana.*

Answer.—This consultant cannot conceive of an operation for regional ileitis in which the whole small intestine, beginning 20 cm. below the ligament of Treitz, and the entire ascending colon are sacrificed, leaving a colostomy. Why should anastomosis of the jejunum to the mid-colon be done when it is assumed that the distal colon, sigmoid, and rectum were healed or normal? Why, then, the colostomy? A young man with 20 cm. of jejunum and a few centimeters of colon can expect his condition to worsen due to electrolyte imbalance and severe anemia. There is no way in which to reverse the situation, once this type of radical operation has been performed. Giving this patient high-calorie, high-vitamin, and high-protein diets is good. There are no predigested foods that have any great advantage over well-cooked, well-prepared foods at home, provided that the foods are slowly eaten and chewed well, with the meals prolonged. Canned baby foods are a favorite among such invalids, though it is not known whether they are of any great advantage. A concentrate protein, four to six tablespoonfuls a day, is a potent source of nitrogen nutrition. Only opium can slow the process of food through the small intestine, and that is not too desirable. Intravenous therapy should provide replacement of sodium, potassium, and calcium, and whole blood may be given as and when it becomes necessary—this will probably be very frequently.

PREGNANCY AND TUBERCULOSIS

To the Editor:—*A 32-year-old woman had tuberculous salpingitis bilaterally 12 years ago; this was treated with drainage through the vagina and with bed rest, without the use of antibiotics. She made a satisfactory recovery and has not had any pelvic symptoms since then. Six years ago she was treated for moderately advanced pulmonary tuberculosis with streptomycin and PAS (duration of chemotherapy, nine months). She recovered, and, at present, her chest x-ray is essentially normal with the exception of few small fibrous strands. Examination reveals moderate thickening of the right adnexa only; endometrial biopsy showed normal findings. Assuming that she could become pregnant, what are the possible risks? Could pregnancy reactivate her pelvic tuberculosis? In light of this history, could she anticipate other complications?* *M.D., Illinois.*

Answer.—Intrauterine pregnancy occurs very rarely in the presence of tuberculous salpingitis, active or healed (Schaefer, Tuberculosis in Obstetrics and Gynecology, Boston, Little, Brown & Company, 1956). The pregnancy itself usually is unaffected, but it may activate and cause the spread of the tuberculosis of the tubes. Healed pulmonary tuberculosis is rarely activated by pregnancy.

CELERY CONTACT DERMATITIS

To the Editor:—*A large number of severe dermatoses, consisting of erythema, edema, vesicles, and large bullae, have occurred in workers in celery fields. The lesions appear within 24 to 48 hours after contact. Celery farmers say that it is due to contact with pink rot, a fungus disease of the celery stalk. Please give further information on the disease, the offending agent, and suggested management.*

Robert Painter, M.D., Grant, Mich.

Answer.—Eczematous dermatitis caused by contact with celery was reported in 1926 by Legrain and Barthe in the French dermatological literature. Henry has published some interesting observations on "celery itch" among British cannery workers (*Brit. J. Dermat.* 45:301, 1933; ibid. 50:342, 1938). These investigators stated that contact dermatitis from celery is caused by the essential oil of the plant. According to Henry, this oil contains limonene, sedanolic acid, sedanonic acid, sesquiterpene, guaiacol, and palmitic acid. It was his opinion that limonene, common also to orange, lemon, bergamot, caraway, and dill, was the eczematogenic factor and that the eruption was the result of an "idiosyncrasy." None of these authors made specific reference to pink rot disease of the celery causing contact dermatitis, but Henry did state that several varieties of celery were handled and "that the pink was most 'pungent' and most likely to cause dermatitis." In this particular group of cases in Michigan,

the harvesters were afflicted. The description of the eruption as consisting of erythema, edema, vesicles, and large bullae correlates with an eczematous process of contact origin. It was not stated which areas were involved. Presumably, however, the hands, forearms, and perhaps the face and neck were involved. The rapid onset of the eruption within 24 to 48 hours suggests contact with a primary irritant substance. On the other hand, if the workers had been exposed previously to harvesting celery, the rapid onset could be based on an allergic response. Of equal consideration is the determination of whether the celery had been sprayed with a fungicide or pesticide containing an irritant and/or sensitizing chemicals a few days before harvesting. The future prognosis for these workmen is highly dependent on determination of these basic factors, because contact dermatoses caused by irritants can be prevented more readily with personal protective measures (gloves, sleeves, and/or barrier creams) than can allergic dermatoses.

BLOOD PRESSURE DETERMINATION AND VALVULAR DISEASE OF THE HEART

To the Editor:—*What would be the criteria for diagnosing hypertension in persons with those valvular diseases of the heart, such as aortic regurgitation, in which there is a decrease of the diastolic pressure? In cases of sclerosis of the mitral valve, where a characteristic, high-pitched systolic murmur, commonly called the sea gull murmur, is usually found, is there regurgitation?*

M.D., Colombia, South America.

Answer.—Little importance can be attached to high systolic blood pressures recorded at the periphery in the presence of free aortic valvular regurgitation associated with increased output needed to maintain systemic flow when there is a large reflux into the left ventricle. Systolic amplification of the arterial pulses in the peripheral arteries, as compared with central aortic pulses, is nearly uniformly shown through direct measurements in patients with this clinical syndrome. The diagnosis of true arterial hypertension must depend on other observations, such as the presence of retinal changes characteristic of hypertension. Although systolic pressures of 170 to 180 mm. Hg when the diastolic pressure approaches zero may be acceptable without associated hypertenion in young people, in older patients the presence of arterial sclerotic rigidity of the vessels will permit even higher systolic pressures without true hypertension being present. By common usage, the "sea gull" murmur, in a broad sense, has come to mean any high-pitched, screeching systolic murmur maximal near the cardiac apex. Whereas ordinarily this murmur is associated with mitral valve insufficiency, at times this type of murmur may be due to aortic valve stenosis, in which case the murmur is heard maximally over the left precordium. When this murmur is associated with mitral valve deformity, some degree of regurgitation must be presumed, even though this may be of such small quantity as to be of little or no hemodynamic significance.

CELIAC DISEASE SYNDROME

To the Editor:—*A child, aged 2, weighing about 18 lb. (8.2 kg.), has a celiac disease syndrome. Cystic fibrosis has been ruled out. The chief distressing symptoms include a chronic profuse nasal discharge and a marked susceptibility to upper respiratory diseases. Chest x-rays show essentially normal findings. The appetite is poor. The child has been on a diet for this condition, and meat, casein, bananas, and honey are some of the best-tolerated foods. About two weeks ago respiratory obstruction occurred, and the child was saved only by aspiration, bronchoscopy, and oxygen given for several days. Should prednisone be given for this condition? Please give other suggestions for treatment.*

M.D., Michigan.

Answer.—The history of "a chronic profuse nasal discharge and a marked susceptibility to upper respiratory diseases" with a "celiac disease syndrome" in a child of this age and weight still sounds like cystic fibrosis. Furthermore, to be excluded are (1) allergy and (2) foreign body in the nares. There should be a minimum of exposure to respiratory infections, especially during winter months. Most helpful would be an entire winter spent in Arizona or the intermittent daily use of a bactericidal lamp in the child's room. Dust, smoke, drafts at night, iced foods, and kissing should be avoided. Maintenance of a relative humidity of 30 to 40% (airguide) and a room temperature of 65 to 72 F should improve the resistance of the upper respiratory mucous membranes, so that the child's ciliated epithelium functions at maximum capacity. Should allergy be an added factor, feather pillows and household pets (dog, cat, or bird) should be excluded from the child's environment. Daily doses of a polyvitamin should be given. At the onset of a respiratory attack, there should be absolute bed rest, increased moisture (50 to 60%), and properly spaced (around the clock), adequate, oral doses of an effective tetracycline given for several days; this dosage should then be gradually decreased. Should an attack increase in severity, especially if there is asthma or chronic bronchitis, prednisone should be given by mouth in a dosage of 1 or 2 mg. every four to six hours for 48 hours, with this dosage decreased by 1 or 2 mg. every few days and not administered longer than 7 to 10 days.

187/202A

The Journal

OF THE

American Medical Association

EDITED FOR THE ASSOCIATION UNDER THE DIRECTION OF THE BOARD OF TRUSTEES BY

AUSTIN SMITH, M.D.

VOLUME 168 September-December, 1958

AMERICAN MEDICAL ASSOCIATION, CHICAGO 10

OFFICIALS OF THE AMERICAN MEDICAL ASSOCIATION—1958-1959

Headquarters of the Association, 535 N. Dearborn St., Chicago 10

GENERAL OFFICERS

President, GUNNAR GUNDERSEN - - - - - - - La Crosse, Wis.
President-Elect, LOUIS M. ORR - - - - - - - - Orlando, Fla.
Vice President, W. LINWOOD BALL - - - - - - Richmond, Va.
Secretary-Treasurer, RAYMOND M. MCKEOWN - - Coos Bay, Ore.
Speaker, House of Delegates, E. VINCENT ASKEY - - Los Angeles
Vice Speaker, House of Delegates, NORMAN WELCH - - Boston
Executive Vice President, F. J. L. BLASINGAME - - - - Chicago

BOARD OF TRUSTEES

R. B. ROBINS, Camden, Ark., 1959; H. H. HUSSEY, Washington, D. C., 1959; W. L. BALL, Richmond, Va., 1959; L. W. LARSON, Chairman, Bismarck, N. D., 1960; J. Z. APPEL, Lancaster, Pa, 1960; J. P. PRICE, Florence, S. C., 1961; G. M. FISTER, Ogden, Utah, 1963; the President and the President-Elect.

JUDICIAL COUNCIL

J. M. Hutcheson	Richmond, Va., 1959
L. A. Buie	Rochester, Minn., 1960
R. Ward	San Francisco, 1961
H. L. Pearson Jr., Chairman	Miami, Fla., 1962
G. A. Woodhouse	Pleasant Hill, Ohio, 1963
Mr. E. J. Holman, Executive Secretary,	Chicago

COUNCIL ON MEDICAL EDUCATION AND HOSPITALS

C. T. Stone Sr.	Galveston, Texas, 1959
W. A. Bunten	Cheyenne, Wyo., 1959
J. M. Faulkner	Cambridge, Mass., 1960
H. English	Danville, Ill., 1960
G. A. Caldwell	New Orleans, 1961
J. W. Cline	San Francisco, 1961
W. C. Wescoe	Kansas City, Kan., 1962
Warde B. Allan	Baltimore, 1962
J. Z. Bowers	Madison, Wis., 1963
L. S. McKittrick, Chairman	Brookline, Mass., 1963
E. L. Turner, Secretary	Chicago

COUNCIL ON MEDICAL SERVICE

J. D. McCarthy, Chairman	Omaha, 1959
J. Lafe Ludwig	Los Angeles, 1959
R. B. Roth	Erie, Pa., 1960
H. B. Woolley	Idaho Falls, 1960
C. E. Wertz	Buffalo, 1961
T. J. Danaher	Torrington, Conn., 1961
R. L. Novy	Detroit, 1962
R. B. Chrisman Jr.	Coral Gables, Fla., 1963
J. F. Burton	Oklahoma City, 1963
David B. Aliman	Atlantic City, N. J.
Mr. George W. Cooley, Secretary	Chicago

COUNCIL ON CONSTITUTION AND BYLAWS

W. Hyland	Grand Rapids, Mich., 1959
B. E. Pickett Sr., Chairman	Carrizo Springs, Texas, 1960
Walter E. Vest	Huntington, W. Va., 1961
W. C. Bornemeier	Chicago, 1962
W. D. Stovall	Madison, Wis., 1963
H. H. Hussey	Washington, D. C.
Gunnar Gundersen	La Crosse, Wis.
E. V. Askey	Los Angeles
Norman Welch	Boston
Mr. George E. Hall, Executive Secretary	Chicago

COUNCIL ON DRUGS

(Standing Committee of Board of Trustees)

W. C. Cutting	San Francisco, 1958
O. O. Meyer	Madison, Wis., 1958
M. H. Seevers	Ann Arbor, Mich., 1958
T. M. Brown	Washington, D. C., 1958
L. Goodman	Salt Lake City, 1959
P. H. Long	Brooklyn, 1959
W. G. Workman	Bethesda, Md., 1959
F. A. Simeone	Cleveland, 1959
C. A. Dragstedt	Chicago, 1960
I. Starr	Philadelphia, 1960
J. M. Hayman	Boston, 1960
E. M. K. Geiling	Chicago, 1961
E. M. Nelson	Washington, D. C., 1961
H. K. Beecher	Boston, 1961
T. Sollmann, Chairman	Cleveland, 1962
J. P. Leake	Washington, D. C., 1962
A. C. Curtis	Ann Arbor, Mich., 1962
H. D. Kautz, Secretary	Chicago

COUNCIL ON SCIENTIFIC ASSEMBLY

(Standing Committee of Board of Trustees)

H. R. Viets	Brookline, Mass., 1958
J. A. Bargen	Rochester, Minn., 1958
S. P. Reimann, Chairman	Philadelphia, 1959
A. McMahon	St. Louis, 1959
L. W. Larson	Bismarck, N. D., 1960
C. A. Lincke	Carrollton, Ohio, 1960
M. E. DeBakey	Houston, Texas, 1961
S. P. Newman	Denver, 1962
W. Scott	Los Angeles, 1962
T. G. Hull, Secretary	Chicago

COUNCIL ON MEDICAL PHYSICS

(Standing Committee of Board of Trustees)

R. Chamberlain	Philadelphia, 1958
O. Glasser	Cleveland, 1958
A. C. Cipollaro	New York, 1958
F. C. Bost	San Francisco, 1959
F. H. Krusen, Chairman,	Rochester, Minn., 1959
M. R. Mobley	Florence, S. C., 1959
L. R. Dragstedt	Chicago, 1960
G. J. Thomas	Pittsburgh, 1960
G. E. Wakerlin	Chicago, 1961
H. H. Reese	Madison, Wis., 1962
D. Vail	Chicago, 1962
S. Warren	Boston, 1962
R. E. DeForest, Secretary	Chicago

COUNCIL ON FOODS AND NUTRITION

(Standing Committee of Board of Trustees)

W. J. Darby	Nashville, Tenn., 1958
C. A. Elvehjem	Madison, Wis., 1958
J. B. Youmans	Nashville, Tenn., 1958
L. A. Maynard	Ithaca, N. Y., 1959
G. A. Goldsmith	New Orleans, 1959
C. S. Davidson, Chairman	Boston, 1959
C. A. Smith	Boston, 1960
D. B. Hand	Geneva, N. Y., 1960
R. Jackson	Columbia, Mo., 1961
G. R. Cowgill	Hamden, Conn., 1961
W. H. Griffith	Los Angeles, 1962
P. L. White, Secretary	Chicago

COUNCIL ON INDUSTRIAL HEALTH

(Standing Committee of Board of Trustees)

R. T. Johnstone	Los Angeles, 1958
L. C. McGee	Wilmington, Del., 1958
C. F. Shook	Toledo, Ohio, 1958
J. N. Gallivan	East Hartford, Conn., 1959
V. C. Baird	Houston, Texas, 1959
O. A. Sander	Milwaukee, 1959
R. A. Kehoe	Cincinnati, 1960
E. S. Jones	Hammond, Ind., 1960
W. P. Shepard, Chairman	New York, 1961
M. N. Newquist	New York, 1961
P. S. Richards	Salt Lake City, 1962
J. H. Sterner	Rochester, N. Y., 1962
B. D. Holland, Secretary	Chicago

COUNCIL ON NATIONAL DEFENSE

(Standing Committee of Board of Trustees)

R. L. Sensenich	South Bend, Ind., 1958
H. C. Lueth	Evanston, Ill., 1958
H. S. Diehl, Chairman	Minneapolis, 1959
R. L. Meiling	Columbus, Ohio, 1959
C. P. Hungate	Kansas City, Mo., 1960
W. B. Martin	Norfolk, Va., 1960
H. B. Wright	Cleveland, 1961
D. H. Poer	Atlanta, Ga., 1961
R. A. Benson	Bremerton, Wash., 1962
P. H. Long	Brooklyn, 1962
Mr. F. W. Barton, Secretary	Chicago

COUNCIL ON RURAL HEALTH

(Standing Committee of Board of Trustees)

F. S. Crockett, Chairman	Lafayette, Ind., 1958
W. W. Washburn	Boiling Springs, N. C., 1958
C. S. Mundy	Toledo, Ohio, 1959
C. R. Henry	Little Rock, Ark., 1959
F. A. Humphrey	Ft. Collins, Colo., 1960
N. H. Gardner	E. Hampton, Conn., 1960
A. T. Stewart	Lubbock, Texas, 1961
C. B. Andrews	Sonoma, Calif., 1961
W. J. Weese	Ontario, Ore., 1962
W. A. Wright	Williston, N. D., 1962
Mrs. A. Hibbard, Secretary	Chicago

COUNCIL ON MENTAL HEALTH

(Standing Committee of Board of Trustees)

L. H. Bartemeier, Chairman	Baltimore, 1958
W. H. Baer	Peoria, Ill., 1958
H. F. Ford	Galveston, Texas, 1958
L. H. Smith	Philadelphia, 1959
G. E. Gardner	Boston, 1959
F. M. Forster	Washington, D. C., 1960
Norman Q. Brill	Los Angeles, 1961
H. T. Carmichael	Chicago, 1961
M. R. Kaufman	New York, 1962
R. J. Plunkett, Secretary	Chicago

SECTION OFFICERS 1958-1959

Anesthesiology—Chairman, John Adriani, New Orleans, La.; Secretary, Vincent J. Collins, 550 First Ave., New York 11.

Dermatology—Chairman, Clarence S. Livingood, Detroit, Mich.; Secretary, Edward Cawley, University of Virginia Hospital, Charlottesville, Va.

Diseases of the Chest—Chairman, M. Jay Flipse, Miami, Fla.; Secretary, Burgess L. Gordon, 4800 Gibson Blvd. S.E., Albuquerque, N. M.

Experimental Medicine and Therapeutics—Chairman, Charles H. Burnett, Chapel Hill, N. C.; Secretary, Elliot V. Newman, Vanderbilt University Hospital, Nashville 5, Tenn.

Gastroenterology and Proctology—Chairman, A. W. Martin Marino, Brooklyn, N. Y.; Secretary, William H. Dearing, 200 First St., S. W., Rochester, Minn.

General Practice—Chairman, S. A. Garlan, New York; Secretary, Eugene I. Baumgartner, 25 Alder St., Oakland, Md.

Internal Medicine—Chairman, William B. Bean, Iowa City, Ia.; Secretary, R. H. Kampmeier, Vanderbilt University School of Medicine, Nashville 5, Tenn.

Laryngology, Otology and Rhinology—Chairman, Victor R. Alfaro, Washington, D. C.; Secretary, Walter E. Heck, Stanford University Hospitals, San Francisco 15.

Military Medicine—Chairman, Alphonse McMahon, St. Louis; Secretary, Col. Charles Bramlitt, Directorate of Professional Services, AFCSG-10, Office of the Surgeon General, USAF, 3800 Newark St., N. W., Washington 25, D. C.

Nervous and Mental Diseases—Chairman, Kenneth E. Appel, Philadelphia; Secretary, A. L. Sahs, University Hospitals, Iowa City, Ia.

Obstetrics and Gynecology—Chairman, Nicholson J. Eastman, Baltimore; Secretary, Keith P. Russell, 511 S. Bonnie Brae St., Los Angeles 57.

Ophthalmology—Chairman, Frank B. Walsh, Baltimore; Secretary, Harold G. Scheie, 313 S. 17th St., Philadelphia 3.

Orthopedic Surgery—Chairman, Lenox D. Baker, Durham, N. C.; Secretary, Robert J. Joplin, 1180 Beacon St., Brookline 46, Mass.

Pathology and Physiology—Chairman, Thomas M. Peery, Washington, D. C.; Secretary, Hugh A. Edmondson, 1200 N. State St., Los Angeles 33.

Pediatrics—Chairman, Wyman C. C. Cole, Sr., Detroit; Secretary, Arild Hansen, 812 Mechanic, Galveston, Texas.

Physical Medicine—Chairman, Arthur L. Watkins, Boston; Secretary, Earl C. Elkins, 200 - 1st St. S. W., Rochester, Minn.

Preventive Medicine—Chairman, Robert A. Kehoe, Cincinnati; Secretary, Frank Princi, University of Cincinnati College of Medicine, Cincinnati 19.

Radiology—Chairman, Ted F. Leigh, Atlanta, Ga.; Secretary, Traian Leucutia, Harper Hospital, Detroit 1.

Surgery, General and Abdominal—Chairman, John H. Mulholland, New York; Secretary, Gustaf E. Lindskog, 333 Cedar St., New Haven 11, Conn.

Urology—Chairman, Milton M. Coplan, Miami, Fla.; Secretary, Edward H. Ray, 203 W. 2nd St., Lexington, Ky.

JOURNALS ABSTRACTED IN THE CURRENT MEDICAL LITERATURE DEPARTMENT, SEPTEMBER-DECEMBER 1958

Abstracts have been made of important articles in the following journals in the Current Medical Literature Department of THE JOURNAL during the past four months. Any of the journals, except those starred, will be lent by the Library of the American Medical Association to individuals in Continental United States and Canada who subscribe to its scientific periodicals and to members of the American Medical Association and its student organization. No charge is made to members, but the fee for other borrowers is 15 cents in stamps for each periodical. Three journals may be borrowed at a time for a period not exceeding five days. Thus most of these journals are accessible to the general practitioner.

*A. M. A. Archives of Dermatology. Chicago.
*A. M. A. Archives of Internal Medicine. Chicago.
*A. M. A. Archives of Neurology and Psychiatry. Chicago.
*A. M. A. Archives of Ophthalmology. Chicago.
*A. M. A. Archives of Otolaryngology. Chicago.
*A. M. A. Archives of Pathology. Chicago.
*A. M. A. Archives of Surgery. Chicago.
*A. M. A. Journal of Diseases of Children. Chicago.
Acta chirurgica belgica. Brussels.
Acta chirurgica italica. Padova.
Acta chirurgica scandinavica. Stockholm.
Acta clinica belgica. Brussels.
Acta dermato-venereologica. Stockholm.
Acta endocrinologica. Copenhagen.
Acta medica scandinavica. Stockholm.
Acta neurológica latinoamericana. Buenos Aires.
Acta neuropsiquiátrica argentina. Buenos Aires.
Acta obstetricia et gynecologica scandinavica. Stockholm.
Acta pharmacologica et toxicologica. Copenhagen.
Acta radiologica. Stockholm.
Acta tuberculosea scandinavica. Copenhagen.
American Heart Journal. St. Louis.
American Journal of Cardiology. New York.
American Journal of Gastroenterology. New York.
American Journal of Hygiene. Baltimore.
American Journal of the Medical Sciences. Philadelphia.
American Journal of Medicine. New York.
American Journal of Obstetrics and Gynecology. St. Louis.
American Journal of Ophthalmology. Chicago.
American Journal of Pathology. Ann Arbor.
American Journal of Roentgenol. and Radium Therapy. Springfield, Ill.
American Journal of Surgery. New York.
American Journal of Tropical Medicine and Hygiene. Baltimore.
American Review of Tuberculosis. New York.
American Surgeon. Baltimore.
Anales de cirugía Rosario. Argentina.
Anales de la Facultad de medicina de Montevideo. Montevideo.
Anatomical Record. Philadelphia.
Anesthesiology. Philadelphia.
Annali dell' Istituto "Carlo Forlanini." Rome
Annales medicinae internae Fenniae. Helsinki.
Annals of Internal Medicine. Lancaster, Pa.
Annals of Otology, Rhinology and Laryngology. St. Louis.
Annales paediatrici. Basel.
Annals of Rheumatic Diseases. London.
Annals of Surgery. Philadelphia.
Archiv für Kinderheilkunde. Stuttgart.
Archiv für klinische Chirurgie. Berlin.
Archiv für orthopädische und Unfall-Chirurgie. Munich.
Archives of Disease in Childhood. London.
Archives françaises de pédiatrie. Paris.
Archives des maladies du coeur et des vaisseaux. Paris.
Archives des maladies de l'appareil digestif. Paris.
Archivos argentinos de pediatría. Buenos Aires.
Archivos peruanos de patología y clínica. Lima.
Archivum chirurgicum neerlandicum. Arnhem.
Arkhiv patologie. Moscow.
Arquivo de patologia. Palhava.
Australian Journal of Experimental Biology and Medical Science. Adelaide.
Australian & New Zealand Journal of Surgery. Melbourne.
Australasian Annals of Medicine. Sydney.
Beiträge zur Klinik der Tuberkulose. Berlin.
Blood. New York.
Boletín de la Asociación médica de Puerto Rico. Santurce.
British Journal of Anaesthesia. Altrincham.
British Journal of Cancer. London.
British Journal of Dermatology. London.
British Journal of Ophthalmology. London.
British Journal of Plastic Surgery. Edinburgh.
British Journal of Surgery. Bristol.
British Journal of Tuberculosis and Diseases of the Chest. London.
British Journal of Urology. Edinburgh.
British Medical Journal. London.
California Medicine. San Francisco.
Canadian Journal of Public Health. Toronto.
Canadian Medical Association Journal. Montreal.
Cancer. Philadelphia.
Cardiologia. Basel.
Chinese Medical Journal. Peking.
Chirurg. Berlin.
Circulation. New York.
Circulation Research. New York.
Cleveland Clinic Quarterly. Cleveland.
Connecticut Medicine. New Haven.
Danish Medical Bulletin. Copenhagen.
Deutsche medizinische Wochenschrift. Stuttgart.
Diabetes. New York.
Die Medizinische. Stuttgart.
Diseases of the Chest. Chicago.
Diseases of the Colon and Rectum. Philadelphia.
Fortschritte auf dem Gebiete der Röntgenstrahlen. Stuttgart.
Gaceta médica de México. Mexico, D. F.
Gastroenterologia. Basel.
Gastroenterology. Baltimore.
Gazzetta medica italiana. Turin.
Geburtshilfe und Frauenheilkunde. Stuttgart.
German Medical Monthly. Stuttgart.
Giornale di clinica medica. Bologna.
Harefuah. Tel-Aviv.
Hawaii Medical Journal. Honolulu.
Illinois Medical Journal. Chicago.
Indian Journal of Medical Sciences. Bombay.
Irish Journal of Medical Science. Dublin.
Jornal brasileiro de neurologia. Rio de Janeiro.
Journal of the American Dietetic Association. Chicago.
Journal of the American Medical Women's Association. New York.
Journal of Bacteriology. Baltimore.
Journal of Bone and Joint Surgery. Boston and London.
Journal of Chronic Diseases. St. Louis.
Journal of Clinical Endocrinology and Metabolism. Springfield, Ill.
Journal français de médecine et chirurgie thoraciques. Paris.
Journal of the Indian Medical Association. Calcutta.
Journal of Infectious Diseases. Chicago.
Journal of International College of Surgeons. Chicago.
Journal of Investigative Dermatology. Baltimore.
Journal of the Kentucky State Medical Association. Louisville.
Journal-Lancet. Minneapolis.
Journal of the Louisiana State Medical Society. New Orleans.
Journal of the Maine Medical Association. Brunswick.
Journal of Medical Society of New Jersey. Trenton.
Journal of Mental Science. London.
Journal of Michigan State Medical Society. St. Paul.
Journal of Neurosurgery. Springfield, Ill.
Journal of Obstetrics and Gynaecology of the British Empire. London.
Journal of Pathology and Bacteriology. Edinburgh.
Journal of Pediatrics. St. Louis.
Journal of the Philippine Medical Association. Manila.
Journal of Tennessee State Medical Association. Nashville.
Journal of Thoracic Surgery. St. Louis.
Journal of Tropical Pediatrics. New Orleans.
Journal of Urology. Baltimore.
Khirurgiya. Moscow.
Klinicheskaya meditsina. Moscow.
Klinische Monatsblätter für Augenheilkunde. Stuttgart.
Lancet. London.
Laryngoscope. St. Louis.
Laval médical. Quebec.
Lyon chirurgical. Paris.
Maandschrift voor kindergeneeskunde. Leyden.
Maryland State Medical Journal. Baltimore.
Medical Journal of Australia. Sydney.
Medicina. Buenos Aires.
Medicina clínica. Barcelona.
Medicine. Baltimore.
Metabolism. New York.
Minerva chirurgica. Turin.
Minerva ginecologica. Turin.
Minerva medica. Turin.
Minerva pediatrica. Turin.
Minnesota Medicine. St. Paul.
Monatsschrift für Kinderheilkunde. Berlin.
Münchener medizinische Wochenschrift. Munich.
Nederlandsch tijdschrift voor geneeskunde. Amsterdam.
Neurology. Minneapolis.
New England Journal of Medicine. Boston.
New York State Journal of Medicine. New York.
Nordisk medicin. Stockholm.
North Carolina Medical Journal. Winston-Salem.
Northwest Medicine. Seattle.
Obstetrics and Gynecology. New York.
Ohio State Medical Journal. Columbus.
Pediatrics. Springfield, Ill.
Pediatriya. Moscow.
Pennsylvania Medical Journal. Harrisburg.
Plastic and Reconstructive Surgery. Baltimore.
Policlinico (sezione pratica). Rome.
Practitioner. London.
La prensa médica argentina. Buenos Aires.
Presse médicale. Paris.
Proceedings of Staff Meetings of Mayo Clinic. Rochester, Minn.
Quarterly Journal of Medicine. Oxford.
Quarterly Journal of Studies on Alcohol. New Haven.
Radiology. Syracuse, N. Y.
Revista da Associacão medica brasileira. São Paulo.
Revista da la Asociación médica argentina. Buenos Aires.
Revista brasileira de medicina. Rio de Janeiro.
Revista Chilena de Pediatría. Santiago.
Revista clínica española. Madrid.

Revista do Hospital das clínicas. São Paulo.
Revista española de pediatría. Saragossa
Revista Médica del Hospital General. Mexico, D. F.
Revue française d'études cliniques et biologiques. Paris.
Revue d'hématologie. Paris.
Revue neurologique. Paris.
Revue de la tuberculose. Paris.
Riforma medica. Naples.
Rivista di clinica pediatrica. Florence.
Schweizerische medizinische Wochenschrift. Basel.
Scottish Medical Journal. Glasgow.
Semaine des hôpitaux de Paris. Paris.
Settimana medica. Florence.
South African Medical Journal. Cape Town.
Southern Medical Journal. Birmingham, Ala.
Surgery. St. Louis.
Surgery, Gynecology and Obstetrics. Chicago.
Terapevticheskiy Arkhiv. Moscow.
Texas State Journal of Medicine. Austin.
Thorax. London.
Tidsskrift for den norske laegeforening. Oslo.
Tuberkulosearzt. Stuttgart.
Ugeskrift for laeger. Copenhagen.
United States Armed Forces Medical Journal. Washington, D. C.
Vestnik khirurgii. Moscow-Leningrad.
Virginia Medical Monthly. Richmond.
Western Journal of Surgery, Obstetrics and Gynecology. Portland.
West Virginia Medical Journal. Charleston.
Wisconsin Medical Journal. Madison.
Yale Journal of Biology and Medicine. New Haven.
Zeitschrift für Geburtshilfe und Gynäkologie. Stuttgart.
Zeitschrift für die gesamte innere Medizin. Leipzig.
Zeitschrift für Kinderheilkunde. Berlin.
Zeitschrift für klinische Medizin. Berlin.

*Cannot be lent.

SUBJECT INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "C," Correspondence; "ab," abstracts; the asterisk (*) indicates an original article in THE JOURNAL.

This is a subject index and one should, therefore, look for the subject word with the following exceptions: Foundations, Lectures, Moving Pictures, and Prizes, under "F," "L," "M," and "P" respectively. "Book Reviews," "Deaths," "Medicolegal Abstracts" and "Societies" are indexed under these titles at the end of the letters "B," "D," "M," and "S." Matter pertaining to the Association is indexed under "American Medical Association." The name of the author, in brackets, follows the subject entry.

For the author index see page 48.

A

ACTH: See Corticotropin
AD; APC; ARD VIRUSES: See Adenovirus
ATP: See Adenosinetriphosphate
ABDOMEN
"flat film" of, what does it mean? (reply) [Lamm] 1154—C
pain, generalized, and acute renal failure, (Diagnostic Problems) [Kushner & Szanto] *1778
pain, upper, esophagitis as cause of, [Bernstein & others] *27
patient lies on to prevent spinal-tap headache, [Brocker] *261; (correction) 913
surgery, hypothermia in; light cooling with anesthesia in poor risk patients, [Brewer] 1588—ab
surgery, routine laparotomies, complications, especially spontaneous pneumothorax, 2083
surgery, transverse incision in colon and rectum surgery, [Trimpi] 2307—ab
surgical condition, systemic lupus erythematosus simulates, [Pollak] 1704—ab
ABILITIES, INC.
competitive industrial activity effects on severely disabled cardiac patients, [Slipyan] *147; 190—E
ABNORMALITIES
congenital, production by diet, experiments in mammals, (Council article) [Warkany] *2020
fetal, origin of; case of rare monster, [de Gennaro] 2313—ab
ABORTION
induced, Sweden, 1394
prevention, Brazil, 2167
therapeutic, Denmark, 920
threatened, does progesterone have adverse effect on fetus in case of? 473
threatened, effect of vibration on, 474
ABSCESS
brain, 47 cases, [Kerr & others] *868
breast, maternal; and antecedent neonatal staphylococcal infection, [Monro] 1275—ab
formation in pneumonia in infants, therapy, [Bucha] 222—ab
gas in pancreas as sign of, [Agnos] 944—ab
injection, due to Candida albicans, [Eriksen] 837—ab
lung, postpneumonic, lobectomy in infancy and childhood for, [Moore] 2308—ab
staphylococcic empyema, [Magovern & Blades] *365
ABSENTEEISM: See Industrial Health, workers
ACCIDENTS
Automobile: See Automobiles
burden on hospitals, report on A. M. A. bulletin, 1080
in childhood, survey, [Fowler] 1820—ab
in school children account for almost half of their death rate, Mich., 419
Industrial: See Industrial Accidents
mortality, report on, 1142
poisoning: See Poisoning
ACCREDITATION: See also Hospitals, accreditation; Joint Commission on Accreditation of Hospitals
program for schools of nursing, report, 58
ACENOCOUMAROL
clinical evaluation, [Rullo & others] *743
ACETAZOLAMIDE
action on blood vessels, India, 1800
toxicity, hepatic coma from, in cirrhosis, [Rissel] 2301—ab
treatment of chronic glaucoma, [de Carvalho] 344—ab
treatment of edema of pregnancy, [Morra] 2070—ab
treatment of epilepsy in children, [Holowach] 955—ab
ACETOPHENETIDIN
toxic agent in etiology of leukemia, [Scheuer-Karpin] 1265—ab
ACETYL SULFAMETHOXYPYRIDAZINE
N. N. D., 1772
ACETYLCHOLINE
content of intestine, India, 1925
ACETYLSALICYLIC ACID (Aspirin)
antipyretic effect of salicylamide compared, toxicity, (replies) [Woodbury] 1259—C; [Bass] 1684—C
ACETYLSALICYLIC ACID—Continued
effects on prothrombin during concurrent use with anticoagulants, 1168
poisoning, accidental, control of, [Cann & others] *717
ACHROMYCIN: See Tetracycline
ACID: See under name of specific acid as Acetylsalicylic Acid
ACIDOSIS
hyperchloremic, in chronic pyelonephritis, [Lathem] 215—ab
respiratory, recognition and management, (illustrated film review) [Smart & others] *2054
ACNE
etiology: methylprednisolone, [McMahon & Gordon] *1208
in adolescent girls, treatment, 983
iodine and, 2333
ACRODYNIA
mercury absorption relation to, 138
ACRYLIC SUBSTANCE
lens operation, 1838
ACTHAR: See Corticotropin
ACTIVITY
physical, fat intake, and blood coagulation, United Kingdom, 1682
Ad Hoc Committee: See American Medical Association
ADAMS, DUNCAN D., Van Meter Prize to, New Zealand, 1570
ADAMS COUNTY Medical Society, Quincy, Ill., offer prizes to teenagers with high scholarship, [Medicine at Work] 1891
ADAMS-Stokes Syndrome: See Heart, block
ADDISON'S DISEASE
chronic, [de Andino] 1405—ab
treatment, current status, (Council report) [Thorn & others] *2130
ADDRESS, change of, for mailing A. M. A. JOURNAL, 52; 193; 292; 2147—E
ADENOCARCINOMA
primary, of ampulla of Vater, [Hayden] 218—ab
ADENOIDAL-PHARYNGEAL-CONJUNCTIVAL VIRUS: See Adenovirus
ADENOIDECTOMY
mouth breathing indication for? 362
ADENOMA
bronchial (carcinoid type), with solitary metastasis and carcinoid syndrome, [Stanford] 838—ab
hypophyseal, surgery plus preoperative and postoperative adrenocortical hormones for, [Decourt] 454—ab
pulmonary adenomatosis, symptomatology and pathology, [Weicksel] 1724—ab
ADENOSINETRIPHOSPHATE
treatment of fatigue, France, 431
ADENOVIRUS (AD; APC; ARD; RI)
infections in children and young adults, comments on vaccination, [Evans] 2077—ab
interstitial plasma-cell pneumonia caused by one? [Vivell] 1412—ab
outbreak of pharyngoconjunctival fever caused by types 3 and 4, [van der Veen] 2077—ab
vaccine, bivalent types 4 and 7, second field evaluation, [Hilleman] 2301—ab
ADHESIONS
intraperitoneal, experimental study, [Jackson] 2065—ab
ADOLESCENCE: See also Puberty
doctors foster scholarship among teenagers, [Medicine at Work] 1891
football for 14-year-old boys, 2331
hypertrichosis and acne in girls, treatment, 983
teen-age clinics, 288—E
ADRENALIN: See Epinephrine
ADRENALS: See also Addison's Disease; Cushing's Syndrome
calcification, significance and therapy in 3-year-old, (reply) [Goldzieher] 1170
cancer with excessive aldosterone production in child with Cushing's syndrome, [Jackson] 1701—ab
chronic cortical insufficiency, [de Andino] 1405—ab
cortex, familial congenital hyperplasia of, [Birke] 2182—ab
cortex, hyperfunctioning lesions, adrenalectomy for, [Ellison] 112—ab
ADRENALS—Continued
excision in breast cancer; correlate clinical results with estrogen production, [Bulbrook] 948—ab
excision in Cushing's syndrome, management and metabolic aspects, [Mason] 2308—ab
excision, inverted electrolyte response following, [Llaurado] 826—ab
excision plus ovariectomy in metastasizing mammary cancer, [Hellström] 829—ab; [Davis] 2306—ab
hypofunction after corticoid withdrawal, [Vermeulen] 1406—ab
mammary cancer and, Portugal, 2170
preparations mask intoxication, interpret tests, (Committee report) [Turner & others] *1359
ADRENOCHROME MONOSEMICARBAZONE: See Carbazochrome
ADRENOCORTICOTROPIC HORMONE: See Corticotropin
ADRENOXYL: See Carbazochrome
ADVERTISING
medical journal, A. M. A. resolution on, 69
over-the-counter medications, report on A. M. A. action on, 57
proprietary drugs, (A. M. A. resolution on) 68; (annual report on) 1052
ADVISORY panels and expert witness, [Sadusk] *2121
AEROPHAGIA with eructation, treatment, 1734
AFIBRINOGENEMIA: See Blood fibrinogen
AFRICA, cancer in, United Kingdom, 928
AGAMMAGLOBULINEMIA: See Gamma Globulin
AGAVE, pneumoconiosis from, [Baader] 1721—ab
AGE
effect on serum mucoproteins and hexosamine, [Schwartz] 975—ab
AGGLUTININS
cold, elevated, in child with hemolytic and hypochromic anemia, (Diagnostic Problems) [Kushner & Szanto] *1013
AGING: See Old Age
AIR
borne ions, negative, inhalation proposed for asthma, hay fever, and other conditions, 1059
cysts, postpneumonic pseudo, in children, [Schlager] 1817—ab
flow resistance, effect on ventilation and respiratory muscle activity, [Fink & others] *2245
"plates" and control of hospital infections, 2329
pollen sampling stations, N. Y., 910
pollution and lung cancer, Belgium, 2167
AIR FORCE: See Aviation, U. S. Air Force
AIRPLANES: See Aviation
ALABAMA
community medical rating survey, (Council survey) 1378
placement survey, doctors and communities rated in, [Medicine at Work] 777
ALBAMYCIN: See Novobiocin
ALCOHOL
driving and, United Kingdom, 2175
gasserian injection for tic douloureux, [Ecker] 119—ab
in Blood: See Blood
induced pain in Hodgkin's disease, [Braun & Schnider] *1882
sensitivity in Hodgkin's disease, [Tweeddale] 1812—ab
vaporized, fire hazards, (reply) [Kneedler] 984
ALCOHOLISM
acute and chronic, serum transaminase activity in, [Bang & others] *156
A. M. A. Committee on, annual report, 1053
chemical tests for, annual report, 1046
deficiency encephalopathies in, [Lapresle] 827—ab
fight against, fellowship centers and outpatient clinics, [Medicine at Work] 1895
handwriting, speech and behavior changes in, (Committee report) [Bogen] 48
interpret tests for, (Committee report) [Turner & others] *1359
legal validity of breath tests, Canada, 2290

ALCOHOLISM—Continued
Ontario Alcoholism Research Foundation reports, 1679; 2291
psychoses in, Sweden, 2294
"scrap iron" intoxication, [Gadsden & others] *1220
treatment, adjunctive, hallucinogenic drugs, [Smith] 2068—ab
treatment, citrated calcium carbimide, [Mitchell] *2008
treatment, disulfiram; toxic effects, [Rathod] 2068—ab
treatment of delirium tremens, hydroxydione sodium succinate, Sweden, 1801
treatment, promazine, arterial thrombosis with gangrene after, [Opinsky & others] *1224
ALDINAMIDE: See Pyrazinamide
ALDOSTERONE
production, excessive in child with adrenocortical carcinoma and Cushing's syndrome, [Jackson] 1701—ab
ALDOSTERONISM
correlate hyperaldosteronism and cardiovascular congestive decompensation, [di Perri] 975—ab
primary, vs. primary renal hypokalemia, [Alsted] 1578—ab
treatment, current status, (Council report) [Thorn & others] *2130
ALESON COMMITTEE report, A. M. A. action on, 2149
ALIDASE: See Hyaluronidase
ALKALI
therapy with PAS, 2082
ALLERGY
alcohol, in Hodgkin's disease, [Tweeddale] 1812—ab
anaphylaxis during general anesthesia impossible? 1958
antibiotic, [Herrell] *1875
awards to medical students, 298
cause of progressive myopia? 1837
conjunctivitis, percentage of epinephrine absorbed systematically from eye, 1832
desensitization, especially against horse serum, 843
dog dander and asthma, (replies) [Howard; and original consultant] 1170
expand Duke University's training program, 420
hard-shelled clams, 982
hazards of therapy in respiratory disease, [Sherman] *1866
house-dust, respiratory; clinical entity in pediatrics, [Mande] 1720—ab
nickel desensitization, method, 1731
nylon, desensitization possible? 1295
olive pollen sensitivity, Israel, 2044
penicillin, fatal, follow-up study, (reply) [Cooper] 319—C
penicillin in poliomyelitis vaccine, sensitivity to, United Kingdom, 2046
penicillinase, 2207
seasonal allergic rhinitis, incidence of complications after antihistamine therapy compared to hyposensitization, 2208
sulfamethoxypyridazine, cutaneous reactions, [Lindsay] 2073—ab
tranquilizing drugs, [Hollister] 964—ab
wheal at tuberculin P. P. D. test site associated with asthmatic attack, 1424
ALOPECIA
etiology: dextran sulfate, United Kingdom, 167:1029, June 21, 1958; (correction) 168: 81, Sept. 6, 1958
etiology: nylon, United Kingdom, 1928
etiology: warfarin sodium, 1169
of beard in multiple sclerosis, 1423
thinning of hair in women, cause, treatment, 137
universalis with nail changes, treatment, prognosis, 1837
ALSEROXYLON: See Rauwolfia serpentina
ALTITUDE
high, study of pregnancy at, 299
ALUDRINE: See Isoproterenol
ALUMINUM
hydroxide and dietary phosphorus, 1838
AMBLYOPIA
dissolving corneal opacities in 79-year-old woman with diabetes, 138
ex anopsia, prognosis, glasses indicated? 1732
tobacco, and vitamin B_{12}, United Kingdom, 435
AMEBIASIS
broad-spectrum amebicide, Brazil, 1254
rectum biopsy in diagnosis of amebic colitis, [Juniper] 127—ab
treatment: bacitracin, India, 1926
treatment: phenanthrolinequinone derivatives, India, 803; (11,925) 1680
AMENORRHEA
secondary, and oligohypomenorrhea, incidence of spontaneous cure, [Westman] 2313—ab
AMERICAN: See also list of Societies at end of letter S
Academy of Neurological Surgery, meeting report, Canada, 2292
AMERICAN—Continued
Association for Advancement of Science publishes proceedings of A. M. A. symposium on human integument, 1062
Bar Association, (A. M. A. liaison committee, report of) 57; 1043; (comments on film, "Man Who Didn't Walk") [Medicine and the Law] 72
Boards, (restrictive effect of certification on medical practice, A. M. A. resolution on) 65; (requirements for certification, annual report) 658; (A. M. A. resolution on creation of Board of General Practice) 897
citizens, basic medical rights of, A. M. A. resolution on, 69
Dietetic Association, A. M. A. co-sponsoring committee on gastrointestinal dietary therapy with, 1058
Drug Manufacturers Association, Liaison Committee of, A. M. A. report on, 1073
Hospital Association (A. M. A., liaison committee report) 57; (recommends all hospitals set up joint conference committees) 1233; (guides for health services in hospitals by A. M. A. and) [Felton] *1854
looks at National Health Service, United Kingdom, 317
Medical Directory, (circulation, annual report on) 1083; (20th edition available) 1232; (revision of categories) 1901
Nursing Home Association, A. M. A. liaison, annual report, 1115
Optometric Association wants amendment to Social Security Act, 2 A. M. A. letters to Congress on, 291
retirement plan, A. M. A. action on, 56
School Health Association presents Howe Honor Award to Dr. Bauer, 1663
surgeons visit Oslo, Norway, 310
urology's obligation to the world, [Barnes] *750
AMERICAN MEDICAL ASSOCIATION
activities in second half of 1958, highlights of, (President's page) 1786
ad hoc Committee on Atomic Medicine and Ionizing Radiation, new, 56; 1059; [Medicine at Work] 1370
ad hoc Committee on Medical Services for Construction Projects, guide, 1067; 1901
American Bar Association liaison, (report) 57; (comments on film: "Man Who Didn't Walk") [Medicine and the Law] 72
American Hospital Association liaison, 57; (guides for health services in hospitals) [Felton] *1854
American Nursing Home Association, Liaison Committee, annual report, 1115
annual and clinical meetings, places and dates, 63; 1039
Annual Congress on Medical Education and Licensure, (annual report on) 1090; (lifelong study is keynote) [Medicine at Work] 1369; 1899
Annual Reports, October 25, p. 1039
Association of American Medical Colleges liaison, 1471
Atlantic City meeting, 1959, (program plans) 1553; (section meetings) 1901
award to CBS for broadcasts of San Francisco meeting, (photo) 193
Awards and Citations at San Francisco Meeting, 53; (for Scientific Exhibits) 900; 1073; (to Mrs. Sewell) 1054
Board of Trustees, (attendance of immediate Past-President at meetings, resolution on) 70; (annual report) 1039; (endorsed liaison with medical schools) 1232; (endorsed recommendation for hospital joint conference committees) 1233; (Dr. W. L. Ball appointed to) 2150
Bureau of Medical Economic Research, (voluntary health insurance for retired persons) [Poiner] *194; (reviews book on medical care) [Bornet] *2025
Business Manager, report, 1081
bylaw changes regarding Scientific Assembly, 1117
Commission on Medical Care Plans, (societies getting Part 2 of final report of) [Medicine at Work] 1367; (report on) 2149
Commission on National Emergency Medical Care Plan, evaluate task force material in study, [Medicine at Work] 773
committee appointments, 53
Committee on Federal Medical Services, VA insurance cases, 905; 2150
Committee on Indigent Care, plans study of state programs, [Medicine at Work] 1893
Committee on Influenza, announcement, 1234
Committee on Injury in Sports, safety in sports, [Medicine at Work] 774
Committee on Insurance and Prepayment Plans, new, [Medicine at Work] 1370
Committee on Maternal and Child Care, Conference on Perinatal Mortality and Morbidity Study Programs, 1554
AMERICAN MEDICAL ASSOCIATION—Continued
Committee on Medical Care for Industrial Workers, (preliminary guide for measuring work absence) 904; 1066; 1112; 1230 (survey of union health centers) 904; 1066; 1112; 1234; (study mobile employee health units) 1898
Committee on Medical Rating of Physical Impairment, visual system, 414-E; (report) *475
Committee on Medicolegal Problems, (handwriting, speech, and behavior changes in intoxication), 48; (interpret tests for intoxication) [Turner & others] *1359
Committee on Preparation for General Practice, progress report submitted by, 1484
Committee to Study A.M.A. Objectives and Basic Programs, A.M.A. action on, 63; 2149
constituent member, application of Virgin Islands Medical Society, 55
cooperation with Sears-Roebuck Foundation, brochure on Business Side of Medical Practice, 818; 935; 1155; 1262; 1401; 1691; 1806; 1932; 2050; 2176; (annual report) 1114
Council on Drugs, symposium-panel on use and abuse of adrenal steroids, program, 41
Council on Foods and Nutrition, (symposium on factors involved in formation and disease of bone, program) 520; (announce clinical nutrition fellowships) 768; (symposium on nutrition in pregnancy) [Stearns] *1655; [Hepner] *1774; [Warkany] *2020; [McGanity & others] *2138; [Macy] *2265
Council on Industrial Health, (asked permission to set up Committee for Classification of Pneumoconioses) 1067; (guide for medical services for construction projects) 1067; 1901
Council on Medical Education and Hospitals, (report on residencies and internships approved) 58; (directory of approved internships and residencies) 521; 694-E; (Dr. Blish appointed to field staff) 695; (annual report on medical education) 1459 (supports development of additional facilities for basic medical education) 1470
Council on Medical Service, (Dr. Mulholland resigns) 55; (action on report of) 58; (curtailment of Medicare programs) 696; (abstracts on work absence) 1019—E; 1133; (Committee reorganization) 1100; (meets with "3rd party" medical chiefs) [Medicine at Work] 1366; (Alabama community medical rating survey) 1378; (conference on perinatal mortality and morbidity programs; health programs for senior citizens) 1554; (indigent medical care in 1958) 2151
Council on Mental Health, medical use of hypnosis, 186
Council on National Defense, (physicians subject to draft call in 1959) 906; (survey of physicians separated from active military service) 1904
Council on Rural Health, expanding challenge, [Medicine at Work] 776
Councils and Committees, listing constituent medical societies by, resolution on, 71
delegate retires, Dr. W. E. Vest, of Huntington, W. Va.; Dr. C. A. Hoffman succeeds him, 292
delegates, new, introduction at San Francisco, 54
Directory: See American Medical Directory
Distinguished Service Award, urge members to submit nominations, 1039
division (special) on long-range planning, resolution, 70
dues, limitations of exemptions for residents, resolution on, 66
election of affiliate members and officers, 63
financial statement reviewed, 56
General Practitioner award, (nominations open) 1154; (award to Dr. L. A. Coffin, photos) 2147—E; 2274
grants-in-aid, annual report, 1060
group practices, list compiled by, [Medicine at Work] 1367
guests, distinguished, at San Francisco meeting, 54
guides for evaluation of management and union health centers, report on, 1111
House of Delegates, (abstract of proceedings of San Francisco Meeting) 53; (members and officers who died) 54; (1957 proceedings mailed) 55; (members) 1025; (Reference Committees) 1026; (meetings at Minneapolis) 1028
immunization guide in industry being prepared by, [Medicine at Work] 1898
Industrial Exhibition, Minneapolis meeting, 1122
Joint Committee on Mental Health in Industry, troubled employee, (Medicine at Work) [Golin] 1371; 1377-E
joint meetings with other national medical associations, resolution on, 68

AMERICAN MEDICAL ASSOCIATION—Continued
Journal, (change of address for mailing) 52; 193; 292; 2147-E; (annual report) 1039; (correction) 1564; (report on special edition on ethics) 1086; (unusual medical questions, new column) 1424; (Editor, Dr. Smith resigns, resolution commending him) 2150
Judicial Council, (ethical interpretations and matters relating to membership, annual report on) 1086; (opinions of) 1555
legislative system to be evaluated, resolution on, 69
letter regarding conferences on aging, from Dr. Blasingame to U. S. Senate, 695
letters to Congress regarding request of optometrists for amendment of Social Security Act, 291
mediation committee, consider establishment of, resolution on, 67
members, affiliate, election of, 63
membership, (service members, reserve officers in Indian service) 59; (resolution of use of stamp) 71; (annual report on records) 1081; (for V. A. physicians) 1117; (ethical interpretation and matters relating to) 1086; (service members, resolution on) 2150
Minneapolis Clinical Meeting, (program) 1025; (industrial exhibition) 1122; (reports of) 1661-E; 1662; (highlights) 2148; (scenes from) 2274-2276
Motion Picture Library, new films added, 938; 1402; 1695; 1935
News, reports on, 58; 1042
Officers, (election of) 63; (list of) 1027; (reports) 1039
Past-President at meetings of Board of Trustees, resolution on, 70
personnel, changes in at headquarters, 695
Philadelphia Clinical Meeting, annual report on, 1073
policy on medical care for indigent in 1958, (Council report) 2151
policy on veterans' medical care, 1103
preliminary guide for measuring work absence due to illness and injury, report on, 1112; 1230
President, address of, San Francisco meeting, 55
President-Elect, address of at San Francisco meeting, 55
President's page, monthly message, 416; 1020; 1786; 2273
Principles of Medical Ethics: See Ethics, Medical
Proceedings of San Francisco Meeting, 53
publications, consultation with interested sections, resolution on, 71
registration at Minneapolis, 1028
reorganization, study of Heller Report, 61; 1039; 2149
report of officers, 1039
resolutions on . . . , 56; 64-71; 2149; 2150
San Francisco Meeting, (abstract of proceedings) 53; (reports on) 896; 1074
Scientific Assembly, (Bylaw changes regarding) 60; 63; 1117 (Sections report of San Francisco meeting) 896; (great "show and tell" sessions) [Medicine at Work] 1363
Scientific Exhibits, (at San Francisco, awards for) 900; (at Minneapolis) 1034
scientific journals circulation, 1083
scientific program at Minneapolis meeting, 1030
Secretary, report of, at San Francisco, 55
Section awards at San Francisco, 901
Section on General Practice, (Chairman's address) [McArthur] *1740
Section on Military Medicine, (Chairman's address) [Hays] *254
Section on Obstetrics and Gynecology wants representation on Joint Commission on Accreditation of Hospitals, resolution on, 898
Section on Pediatrics, (Chairman's address) [Wheatley] *856; (reply) [DeBacker] 1929-C
Section on Preventive Medicine, (Chairman's address) [Underwood] *1000
Section on Urology, (Chairman's address) [Barnes] *750
Sections of Scientific Assembly, report of San Francisco meeting, 896
statement regarding appropriation for military dependents before Senate committee, 1551
statement regarding number of hospital beds to be authorized in VA facilities before House committee, 191
Student A. M. A.: See Students, Medical
suggested guides for medical society sponsored voluntary prepayment medical benefit plans, annual report on, 1116
Washington Office, (evaluation, resolution on) 69; (annual report) 1048
Woman's Auxiliary: See Woman's Auxiliary
AMIDOPYRINE: See Aminopyrine
AMINES
pressor, in shock of myocardial infarction, (Council report) [Selzer & Rytand] *762
AMINO ACIDS: See also specific acids as Phenylalanine
plasma, in malignancy, India, 2168
p-AMINO-BENZOLSULFONAMIDO-PHENYL-PYRAZOL
long-acting sulfonamide, clinical experiences with, [Esselier] 1722—ab
Δ-AMINOLEVULIC ACID
urinary, in different types of porphyria, [Haeger] 2181—ab
4-AMINO-N^{10} METHYL PTEROYLGLUTAMIC ACID
treatment of choriocarcinoma and related trophoblastic tumors in women, [Hertz & others] *845; 894-E
AMINOPHERASE: See Transaminase
AMINOPYRINE
prednisone with: Pyracortine, India, 2043
toxic agent in etiology of leukemia, [Scheuer-Karpin] 1265—ab
AMINOSALICYLIC ACID (PAS)
phenyl ester of (Tebamin), clinical studies, [Törning] 1284—ab
treatment, alkali with, 2082
treatment plus isoniazid and streptomycin in urogenital tuberculosis, [Hansson] 1720—ab
AMMONIA: See also Blood ammonia
intoxication in cirrhosis after chlorothiazide therapy, [Magid & others] *35
AMNIOTIC FLUID
maternal death due to pulmonary embolism by, [Carone] 2314—ab
AMPHETAMINE
athletes and performance, [Medicine at Work] 775; (A. M. A. committee to continue study) 2150
toxicity: psychosis, United Kingdom, 2046
AMPHOTERICIN B
treatment of cryptococcal meningitis, [Rubin] 1271—ab
AMPULLA OF VATER
adenocarcinoma, primary, [Hayden] 218—ab
AMYLOIDOSIS
of heart, [Mulligan] 348—ab
primary, of ureter, [Andreas] 466—ab
relation to collagen disease, [Teilum] 1813—ab
ANALGESIA
anileridine hydrochloride as, [Therien & others] *2098
balanced, for poor-risk patient undergoing thoracic surgery, [Santos & Sweet] *1977
congenital, generalized, [Lamy] 464—ab
obstetric, pulmonary hyaline membrane contamination by fluid of birth canal in rabbits, [Snyder] 120—ab
promethazine in obstetrics, [Carroll & Moir] *2218
ANAPHYLAXIS: See Allergy
ANASARCA
edema, polyserositis and, anomalous case of, [Rowntree & others] *411
ANATOMY
Gray's Anatomy, centenary celebrated, United Kingdom, 1152
inadequate supply of anatomical material, 1502
ANCYLOSTOMIASIS
braziliensis, creeping eruption, [van Zeben] 833—ab
ANDROGENS
testosterone enanthate, high doses for cancer of cervix, [Rossi] 1584—ab
testosterone enanthate in palliative treatment of genital cancer, [Giornelli] 1583—ab
testosterone propionate and castration for breast carcinoma, [Nogués] 713—ab
treatment of mammary cancer in women, [Vaccato] 950—ab; (sex chromatin in cell nucleus) [Ehlers] 1161—ab
treatment plus estrogens for degeneration of teeth? 2333
treatment (topical) in vulvar kraurosis-leukoplakia syndrome, [Richardson] 2312—ab
ANEMIA
after subtotal gastrectomy, [van Geertruyden] 217—ab
aplastic, 50 cases, [Mohler] 1264—ab
aregenerative, with benign thymoma, [Clarkson] 1403—ab
chronic, simple, treatment, 227
Cooley's: See Leptocytosis
erythremic myelosis and familial thalassemia, [Olshin] 1281—ab
hemolytic and hypochromic, and elevated cold agglutinins in child, (Diagnostic Problems) [Kushner & Szanto] *1013
hypochromic, ferrous succinate for, India, 1151
hypochromic, in hiatus hernia confused with angina pectoris, (replies) [Schaus; and original consultant] 228
in pregnancy, (United Kingdom) 923; (iron-deficiency, prophylaxis) [Kerr] 1939—ab
Mediterranean: See Leptocytosis
ANEMIA—Continued
sickle cell, role of spleen and effect of splenectomy in, [Sprague] 224—ab
splenic pancytopenia, primary; dramatic effect of splenectomy, [Tapie] 2188—ab
ANEMIA, PERNICIOUS
diagnosis, Schilling test in, [Abels] 442—ab
diagnostic value of radioactive vitamin B$_{12}$, [Pitney] 442—ab
intrinsic-factor-inhibiting substance in serum after oral treatment, [Schwartz] 943—ab
treatment, intrinsic factor plus vitamin B$_{12}$, [Croizat] 1586—ab
treatment, vitamin B$_{12}$, administration and dosage, 1836
ANESTHESIA
better, Norway, 923
complications: cardiac arrest, (R-wave monitor to detect) [Veling] *753; (problem of) [McCarthy] *2101
cyclopropane, manual and mechanical control of ventilation during, [Wester & others] *2249
death due to change of, United Kingdom, 1927
electroencephalography to control depth, [Bakulev] 1164—ab
emphysematous patient and, [Nunn] 974—ab
factor in decline of maternal mortality, [Klein & Clahr] *237
general, anaphylaxis impossible during? 1958
general, complications of endotracheal intubation, [Hamelberg & others] *1959
iatrogenic disease and, [Dundee] 974—ab
intraosseous, in operations on extremities, [Okhotsky] 1825—ab
light cooling as adjunct in poor risk patients, [Brewer] 1588—ab
local, absorption, [Campbell & Adriani] *873
local, is heat sterilization a necessity? [Bridenbaugh & Moore] *1334
potentiated, new Soviet drugs, [Kasansky] 1824—ab
problems in cardiopulmonary bypass for open heart surgery, [Keats] 1289—ab
regional, reappraisal, [Bonica] *734
single lung, in surgery, [Zhorov] 1417—ab
spinal, arachnoiditis, and paraplegia, [Joseph & Denson] *1330
spinal, electromyogram to evaluate neurological complications of, [Marinacci & Courville] *1337
spinal, from surgeon's standpoint, [Scarborough] *1324
spinal, pharmacology of compounds used, [Featherstone] *1327
ANEURYSM
arterial, splenic, [Ward-McQuaid] 824—ab; (ruptured) [James] 825—ab
congenital, of aortic sinuses, prognosis, [Davidsen] 115—ab
intracranial arteriovenous, effect on cardiovascular system, [Höök] 335—ab
of internal carotid artery and its bifurcation, surgery for, [Björkesten] 450—ab
of middle cerebral artery, [Björkesten] 1712—ab
traumatic, of thoracic aorta, acute and chronic, roentgen diagnosis, [Steinberg] 973—ab
ANGINA PECTORIS
assay of antianginal agents: "rapport period," [Cole & others] *275
hiatus hernia with symptoms similar to, (replies) [Schaus: and original consultant] 228
internal-mammary-artery ligation fails to relieve, [Fish] 1709—ab
patient and physician in symptom formation, [Chambers & others] *1617
treatment: iproniazid, (Switzerland) 1572; [Casellas Bernat] 1946—ab; [Master] 2324—ab
ANGIOMATOSIS
retinae, 11 years after diathermy coagulation, [Vail] 2322—ab
treatment: radioactive iodine, [Segal] 346—ab
ANILERIDINE HYDROCHLORIDE
as analgesic and sedative, [Therien & others] *2098
ANIMALS: See also Dogs; Pigs
animal care meeting, Chicago, Dec. 3-5, 1662
animal experimentation, supply of material in medical education, 1503
animal experimentation, United Kingdom, 926
rabies in coyote, Mich., 909
ANIMATION, suspended, United Kingdom, 1152
ANISINDIONE
new anticoagulant, United Kingdom, 1928
ANOMALIES: See Abnormalities; under names of specific organs as Heart
ANOREXIA: See Appetite
ANOXIA: See Oxygen deficiency
ANSOLYSEN: See Pentolinium Tartrate
ANTABUSE: See Disulfiram
ANTHRAX
bone meal and, United Kingdom, 314
ANTIBACTERIALS: See Antibiotics; Chemotherapy; and under specific drugs

ANTIBIOTICS: See also under specific names as Penicillin
complications of mastoiditis in antibiotic era, [Morrow] 124—ab
disks, control in Canada, 1677; [Greenberg] 1726—ab
factory, health hazards in, Denmark, 208
incidence of morbidity and disorders secondary to serofibrinous pleurisy in pulmonary tuberculosis before and after era of, [Batini] 2317—ab
new, iturine, Belgium, 2290
new, misuse of kanamycin, [Mann] 814—C
prolonged corticosteroid therapy with, 134
resistant staphylococcal outbreaks in medical and surgical ward, [Barber] 945—ab
resistant staphylococcic infections, familial, caused by exposure of babies in hospital nurseries, [Hurst] 1826—ab
sensitivity tests of Escherichia coli strains isolated in 1957, [Tóth] 123—ab
staphylococcic enteritis and, Sweden, 1395
toxicity, gastrointestinal, [McHardy] *1868
toxicity, hazards, (United Kingdom) 928; [Herrell] *1875
treatment of acute tonsillitis and otitis media, United Kingdom, 2049
treatment of bartonellemia in man, [Larrea B.] 1946—ab
treatment of protracted septic endocarditis, [Chikina] 939—ab
yeast, with therapeutic and prophylactic properties, [Parfentjev] 1724—ab
ANTIBODIES
Poliomyelitis: See also under Poliomyelitis
poliovirus, in pregnancy, transfer, persistence and induction in infants, [Martins da Silva & others] *1
rubella neutralizing, in gamma globulin, [Krugman] 1281—ab
tuberculosis, in patients with Boeck's sarcoid, [Müller] 1288—ab
ANTICHOLINESTERASE
intoxication, control of, [Cann & others] *717
ANTICOAGULANTS: See also under specific anticoagulants, as Acenocoumarol
effects on occurrence of cardiac rupture and hemopericardium after heart infarction, [Aarseth; Lange] 1415—ab
new, United Kingdom, 1928
to prevent cerebral thrombosis after one attack in man 65? 1593
toxicity, effects of concurrent use of antihistamines and aspirin, 1168
treatment, (Norway) 309; (long-term, United Kingdom) 924; [Owren] 1163—ab
treatment of acute myocardial infarction, [Richards] 439—ab
treatment of acute venous thromboembolism, [Anlyan & others] *725
treatment, oral surgery during, 2081
ANTICONVULSANTS: See Convulsions
ANTIDIURESIS: See Diuresis
ANTIGENS
treponemic, France, 1255
ANTIHISTAMINES: See also specific antihistamines
effects on efficiency of anticoagulants, 1168
ANUS
imperforate, failure of migration of rectal opening as cause of, [Bill] 116—ab
tumors, lymphoid polyps, [Holtz] 115—ab
ANXIETY
patient and physician in cardiac symptom formation, [Chambers & others] *1617
AORTA
abdominal, occlusion, [Chiappa] 972—ab; (surgical considerations) [De Bakey] 2188—ab
Aneurysm: See Aneurysm
catheterization, coronary arteriography in ischemic heart disease, [Thal & others] *2104
catheterization, percutaneous left ventricular puncture with, [Fleming] 447—ab
coarctation repair with relief of hypertension in man 57, [Kittle & others] *2006
disease, acquired, surgical treatment, [Gwathmey] 1268—ab
grafts, failure and replacement of, [Gaspar] 1267—ab
idiopathic retroperitoneal fibrosis involving, [Hackett] 1707—ab
injury, nonpenetrating traumatic, [Parmley] 113—ab
isthmus stenosis, surgical treatment, [Kremer] 1706—ab
roentgen study in determination of operability in arteriosclerosis of lower extremities, [Wylie] 2077—ab
roentgen study, technic, France, 1254
AORTIC VALVE
endocarditis, and brucellosis, [Peery] 1810—ab
stenosis, congenital, valvotomy during cardiopulmonary bypass for, [Spencer] 822—ab
stenosis, practical management, [Glover & Gadboys] *229
stenosis, segmentary, Brazil, 802
surgery, direct coronary artery perfusion, [Kay & others] *1767
APHTHOSIS: See Mucous Membranes
APOPLEXY: See Brain hemorrhage
APPARATUS: See also Equipment; Instruments; and specific apparatus
dispensing of appliances by physicians, (Judicial Council opinion on) 1556
APPENDICITIS
falling death rate from, Norway, 922
in childhood, 1,358 cases, [Longino] 1279—ab
incidence high in Bombay State, [Patel] 1725—ab
peritonitis from, treatment with and without Terramycin, [Adwan] 332—ab
APPETITE
anorexia nervosa: somatic disorder, [Williams] 1271—ab
APPLIANCE: See Apparatus; Braces
APRESOLINE: See Hydralazine
ARACHNODACTYLY (Marfan's Syndrome)
[Erichsen] 2183—ab
cardiovascular disease in, [van Buchem] 1698—ab
heredity, importance of autopsies, [Marks & Gerson] *1450
ARACHNOIDITIS
paraplegia, and spinal anesthesia, [Joseph & Denson] *1330
ARALEN: See Chloroquine
ARGENTAFFINOMA: See Carcinoid
ARISTOCORT: See Triamcinolone
ARM: See also Extremities
chronic lymphedema, treatment, 1834
ARMAZIDE: See Isoniazid
ARMED FORCES
A. M. A. membership, resolution on, 2150
Colonel Benford, named director of medical publications, 1247
commissioning of optometrists, A. M. A. report on, 1068
Dependents, Medical Care for: See Medicare
survey of discharged medical personnel, A. M. A. report on, 1069
ARMY, UNITED STATES
Brig. Gen. Prentiss retires, 1247
early commissioning of medical students, 1536
medical research and development command established, 1247
reduces size and frequency of booster shots, 82
reserve hospital, new headquarters, N. Y., 1382
ARRHYTHMIA: See also Atrial Fibrillation; Tachycardia; Ventricular Fibrillation
antiarrhythmic drugs in shock of myocardial infarction, (Council report) [Selzer & Rytand] *762
asystole complicating acute myocardial infarction, cardiac pacemaker and intravenous isoproterenol for, [Solarz & others] *2124
control during cyclopropane anesthesia, manual and mechanical control of ventilation, [Wester & others] *2249
in experimental syncope, [Dermksian & Lamb] *1623
induced by common respiratory maneuvers, syncope with [Dermksian & Lamb] *1200
mephentermine and, [Wilson] 1944—ab
ARSENIC
arsine poisoning from cleaning sulfuric acid tanks, United Kingdom, 311
ARTERENOL (norepinephrine)
gangrene of extremities following cardiac infarction and, [Greenbaum] 125—ab
ARTERIES
Aneurysm: See Aneurysm
basilar insufficiency, roentgen diagnosis and surgical treatment, [Crawford & others] *509
Coronary: See also Angina Pectoris; Arteriosclerosis; Thrombosis
coronary, angiocardiography in Bland-White-Garland syndrome, [Lang] 2076—ab
coronary, anomalous left, surgery using poudrage technic for, [Paul] 112—ab
coronary arteriography in ischemic heart disease, [Thal & others] *2104
coronary arteriovenous fistulae, congenital, surgery for, [Fell] 1705—ab
coronary circulation, anastomosis in, United Kingdom, 2173
coronary, direct perfusion for aortic valve surgery, [Kay & others] *1767
coronary disease, consensus about atherogenic index, 360
coronary disease, 867 patients, India, 1255
coronary disease, etiology, Indian point of view, [Malhotra] 1575—ab
coronary disease, hypercholesterolemia and its treatment, [Oliver] 439—ab
coronary disease in rural communities, United Kingdom, 315
coronary disease, new concepts, results after surgery, [Beck & others] *2110
coronary insufficiency after oral gallbladder dye, [Littman] 352—ab
coronary, left, anomalous origin of; physiologic defect and surgical treatment, [Case] 326—ab
coronary occlusion, experimental ligation of internal mammary artery for, [Sabiston] 329—ab
ARTERIES—Continued
coronary occlusion, myocardial consequences in coronary atherosclerosis, [Himbert] 439—ab
grafts, peripheral, of crimped nylon and Teflon, [Edwards] 452—ab
homografts, clinical comparison with braided nylon, [Hohf] 2305—ab
iliac and femoral, occlusion, surgical considerations, [De Bakey] 2188—ab
mammary (internal), considerations and comparisons of ligation operation according to Davide Fieschi technic in dogs, [Zagnoni] 2304—ab
Mammary (internal) ligation: See also Angina Pectoris; Arteries, coronary; Myocardium
mesenteric, superior, occlusion of duodenum by compression of, [Bitner] 129—ab
peripheral insufficiency, endarterectomy for, Norway, 1152
pulmonary, angiocardiography in Bland-White-Garland syndrome, [Lang] 2076—ab
pulmonary pressure, frequency of postprimary pulmonary tuberculosis according to, [Mattson] 2298—ab
renal, nephrogenic hypertension following operative trauma to, [McDonald] 451—ab
surgery, clinical use of elastic Dacron prosthesis, [Szilagyi] 2305—ab
vertebral, atheroma near origin, roentgen diagnosis and surgical treatment of basilar artery insufficiency from, [Crawford & others] *509
vertebral, injury in whiplash injuries, [Seletz] *1750
ARTERIOSCLEROSIS
arterial hypertension of atherosclerosis, [Lian] 323—ab
atherogenesis and cholesterolemia, effects of dietary protein and carbohydrate in cockerels on high-fat, high-cholesterol mash, [Stamler] 976—ab
atherogenesis and plasma lipids in cholesterol-fed cockerels, effects of dietary proteins, methionine and vitamins on, [Stamler] 976—ab
atherogenic index, consensus regarding, 360
atherosclerosis and serum mucoproteins in Australian aborigine, [Schwartz] 1585—ab
atherosclerosis in Rhesus monkeys, hypercholesteremia induced by dietary fat and cholesterol, [Cox] 969—ab
cardio-aortic atherosclerosis in presenile and senile patients, [Rosselli] 970—ab
cerebral, angiographic evaluation of, [Tatelman] 352—ab
comparative studies of atherosclerosis in Costa Rica, Guatemala and New Orleans, [Tejada] 945—ab
coronary atherosclerosis, coronary occlusion and myocardial consequences in, [Himbert] 439—ab
effect of atherosclerosis upon serum mucoprotein and hexosamine, [Schwartz] 975—ab
etiology: calcium in, 1297
experimental atherosclerosis, Canada, 2290
heart anomalies with pulmonary hypertension, pulmonary embolism, myocardial infarction and, (Diagnostic Problems) [Kushner & Szanto] *277
nylon bifurcation grafts in, [Hill] 2309—ab
obliterative, thrombendarterectomy for, Norway, 923
of lower extremities, aortography to determine operability, [Wylie] 2077—ab
plasma-clearing effect of gastric mucin in healthy and atherosclerotic subjects, [Rossi] 1699—ab
reduce incidence and severity of atherosclerosis, lower blood lipids by changing food patterns, [Brown & Page] *1989
ARTERITIS
186 cases, France, 803
ARTHRITIS
award exhibit symposium, 903
fellowships, awards open, 79
Gairdner Foundation international awards in, 2281
of spine, treatment, 843
suppurative, complicating rheumatoid arthritis, [Kellgren] 109—ab
ulcerative colitis with, [Bywaters] 819—ab
ARTHRITIS, RHEUMATOID
complications: laryngeal stridor, [Darke] 123—ab
complications: suppurative arthritis, [Kellgren] 109—ab
diagnosis, slide latex fixation test, [Singer & Plotz] *180
equally common in both sexes, United Kingdom, 312
of cervical spine in adult, [Sharp] 2303—ab
100 cases, India, 804
treatment: antimalarial drugs, Denmark, 208
treatment: chloroquine, [Erlendsson] 964—ab
treatment: intra-articular hydrocortisone, United Kingdom, 1927
treatment (long-term), mepacrine and chloroquine, [Erlendsson] 964—ab

ARTHRITIS, RHEUMATOID—Continued
treatment: prednisone, metabolic and clinical effect, [Ward] 836—ab
treatment, side-effects from methylprednisolone, [McMahon & Gordon] *1208
treatment: triamcinolone, United Kingdom, 1258
ARTHRODESIS
compression in, compare methods of fusion of knee, [Stewart] 328—ab
extra-articular, of subtalar joint (Grice procedure) in cerebral palsy, [Baker & Dodelin] *1065
ARTHROPLASTY
use of skin in, Finland, 308
ARTHROSIS: See Knee
ARYL SULFONYLUREAS: See Sulfonylureas
ASCARIASIS
surgical, in children, [Fernando] 1407—ab
ASCITES: See also Liver cirrhosis
antidiuretic factor and, India, 1150
laparoscopy in ascitic syndromes presenting diagnostic difficulties, [Girard] 2189—ab
ASCORBIC ACID
hypovitaminosis C and osteomyelitis in children, [della Casa] 1819—ab
natural vs. synthetic form, 2082
treatment of progressive pigmentary dermatosis, (replies) [Benedek; and original consultant] 1594
ASPHYXIA
preventing, care of patient with multiple injuries, [Aufranc] *2091
ASPIRATION
of food and vomitus, United Kingdom, 1152
ASPIRIN: See Acetylsalicylic Acid
ASSOCIATION: See also American Medical Association; Societies, Medical; list of Societies at end of letter S
of American Medical Colleges, (annual report on A. M. A. cooperation with) 1088; 1689; (medical schools and practice liaison) 1232; (annual teaching institute) 1468; (A. M. A. collaboration with) 1471
of Teachers of Preventive Medicine, review book on medical care by, (Bureau article) [Bornet] *2025
ASTEROID BODIES
hyalitis, incidence of diabetes and hypercholesteremia in, [Smith] *891
ASTEROL: See Diamthazole Dihydrochloride
ASTHMA
attack, wheal at tuberculin P. P. D. test site with, 1424
dog dander and, (replies) [Howard; and original consultant] 1170
follow-up on fate of children, [Ryssing] 1942—ab
in children, Denmark, 910
in children, pulmonary atelectasis in, [Luhr] 2194—ab
physical conditioning program for children, [Scherr & Frankel] *1996
pulmonary sensory endings hyperexcitable in; measurement, characteristics, causes, and role as reflex factor, [Tiffeneau] 1588—ab
sedimentation rate affected by? 2334
treatment, ACTH action in, 1836
treatment, hazards in, [Sherman] *1866
treatment, hydrocortisone inhalation, [Herxheimer] 2196—ab; [Heim] 2197—ab
treatment, hydrocortisone, United Kingdom, 1928
treatment, inhalation of negative air-borne ions proposed for, 1059
treatment, methylprednisolone, side-effects in, [McMahon & Gordon] *1208
ASYSTOLE: See Arrhythmia
ATABRINE: See Quinacrine
ATAXIA
cerebellar, acute, of undetermined origin in childhood, [Walcher] 1941—ab
hereditary, Refsum's syndrome, United Kingdom, 927
spinal form of hereditary sclerosis, ACTH or corticosteroids for? 1957
ATELECTASIS: See Lungs, collapse
ATHEROMA
near origin of vertebral artery, roentgen diagnosis and surgical treatment of basilar artery insufficiency, [Crawford & others] *509
ATHEROSCLEROSIS: See Arteriosclerosis
ATHETOSIS
congenital, not helped by chemopallidectomy, [Paxton & Dow] *755
ATHLETICS: See also under specific sport, as Boxing
amphetamines, athletes, and performance, [Medicine at Work] 775; (A. M. A. committee to continue study) 2150
for children, competitive, [Hoxie] *1439
for children, desirable, [Maksim] *1431
for children, educational aspects, [Hein] *1434
implications of longitudinal research in fitness programs, [McCammon & Sexton] *1440
injuries, conference on, Wis., 77
pyodermia in runners, Sweden, 211
ATHLETICS—Continued
safety in sports, a milestone and a program, [Medicine at Work] 774
ATLAS
dislocation on axis, value of early fusion of C-1, C-2, and C-3, [Alexander] 453—ab
ATOMIC ENERGY: See also Radioactive
acute clinical effects of penetrating nuclear radiation, [Gerstner] *381
Commission to lease or sell heavy water, 301
demonstration program in high schools, 797
flash; flash blindness and chorioretinal burns produced by, (guest editorial) [Byrnes] 778—E
Hydrogen Bomb: See Hydrogen Bomb
medical maneuvers after mock nuclear explosion, United Kingdom, 2172
medicine, A. M. A. *ad hoc* Committee on, 56; 1059; [Medicine at Work] 1370
medicine, program of Navy, 1541
nuclear nursing, establish Navy course in, 914
peaceful uses, WHO report, 929
penetrating, acute clinical effects of, [Gerstner] *381
stomach carcinoma in Hiroshima, [Murphy] 469—ab
warfare, use of medical x-ray film in, [Nitka] 130—ab
ATOSIL: See Promethazine
ATRIAL FIBRILLATION
paroxysmal, affected by carotid sinus stimulation? 1169
ATROPINE
treatment of arrhythmia due to respiratory maneuver, [Dermksian & Lamb] *1623
ATTORNEYS
opinions of 10,000 sought in medicolegal study, [Medicine at Work] 1899
physicians and, interprofessional code for, 1661—E; [Medicine and the Law] 1663
AUSCULTATION
important aid to diagnosis of fractures, [Colwill] 116—ab
AUTOMOBILES
accidents, (Denmark) 707; (United Kingdom) 803
accidents, causes vs. symptoms, [Blossom] *2224
accidents, deaths decrease, 2280
accidents, education in prevention of, [Neyhart] *2209
accidents, importance of cough syncopy to, Denmark, 1924
accidents, ruptured diaphragm in, [Bernatz & others] *877
accidents, 22,880 deaths in 8 months, 6% below last year, 1244
accidents, whiplash injuries, [Seletz] *1750
Allstate Safety Crusade Certificate of Commendation for leadership in safety, Va., 76
drivers, breath tests, legal validity, Canada, 2290
drivers' license, medical opinion on, Canada, 431
driving and alcohol, United Kingdom, 2175
mobile units in employee health programs, [Medicine at Work] 1898
motoring, [Leisure Corner] 103
parking, and patients, Canada, 1679
request old pictures of, Ill., 1909
safety, objectives for state medical society traffic safety committees, [Rodger] *2215
AUTOPSIES
hospitals having the highest rates, 524
importance of, illustrative case, [Marks & Gerson] *1450
tissue diagnosis in, transforaminal curet necropsy of brain, [MacHaffie] 1823—ab
AVIATION
acute respiratory disease in Royal Air Force, 1683
flying personnel, cardiac arrhythmias in experimental syncope, [Dermksian & Lamb] *1623
International Symposium on Physics and Medicine of Atmosphere and Space, 797; [Medicine at Work] 1369
licensing of pilots with diabetes, 363
medical considerations of exposure to microwaves, [Barron & Baraff] *1194
medical problems of space flight, symposium on, Texas, 1383
medicine, A. M. A. Committee on, annual report, 1065
medicine, Board action on C. A. A., 55
medicine, graduate training for naval officers, 1540
medicine in private practice, [Vastine] *1185
medicine, school of, authorize new research laboratories at Brooks Air Force Base, 82
military symposium on space medicine, 301
national space program, annual report on, 1071
research on human factors of aerial warfare, Stapp] *1744
syncope in healthy flying personnel, incidence, mechanisms, and significance, [Dermksian & Lamb] *1200
10 years of space medicine, 2024—E
AVIATION—Continued
20-year study of physiological measurements in senior airline pilots, [Kidera] *1188
AVIATION, U. S. AIR FORCE
consultants and command surgeons conference, 914
consultants visit installations overseas, 2035
Flight Test Center, role of Human Factors Branch at, [Rowen] *1190
Maj. Gen. Armstrong retires, 1247
medical symposium in Japan, 425
new hospitals, (photos) (Illinois) 301; (Andrews Air Force Base) 2035
program for medical students, 1541
AXILLA
excessive perspiration, treatment, (replies) [Berberian; and original consultant] 363
AXIS
dislocation of atlas on, value of early fusion of C-1, C-2, and C-3, [Alexander] 453—ab
AZURE A RESIN
in tubeless gastric analysis, [Rosenthal & Buscaglia] *409

B

BACITRACIN
treatment of amebiasis, India, 1926
BACK
problem back, [Kirkpatrick] *1864
BACTERIA
bacterial lipopolysaccharides for inflammation of adnexa, [Fricke] 1273—ab
mycobacterial etiology of multiple sclerosis, [Bauer] 1410—ab
BACTERIOPHAGE
treatment of staphylococcic infections, 1423
BAGASSE; BAGASSOSIS: See Pneumonoconiosis
BALDNESS: See Alopecia
BANDAGE: See Dressings
"BANGUNGUT syndrome" clinical reconstruction, [Nolasco] 1403—ab
BARBERS
sterilization of tools, 362
BARBITURATES
toxicity: accidental poisoning, control of, [Cann & others] *717
toxicity: acute poisoning, treatment, 10 years' experience, [Louw] 457—ab
treatment of tetanus, [Miller & Stoelting] *393
BARTONELLOSIS
bartonellemia in man, antibiotics in, [Larrea R.] 1946—ab
BASIC SCIENCES
applied, instruction, annual report on, 1100
functions and structure of modern school of, approved and recommended for adoption, 1080; 1096; 1470
graduate education in, 1405; 1496
BAUER, W. W., Howe Honor Award presented to by American School Health Association, 1663
BEADLE, GEORGE WELLS, Nobel prize to, 2159
BEADOX: See Pyridoxine
BEHAVIOR
changes in intoxication, (Committee report) [Bogen] 48
BEHCET SYNDROME
or Touraine's aphthosis, [Thibault] 943—ab
BELCHING: See Eructation
BEMEGRIDE
treatment of barbiturate poisoning, (Cann & others) *717
BENADON: See Pyridoxine
BENSON'S DISEASE: See Hyalitis, asteroid
BENZATHINE PENICILLIN G
mass prophylaxis of epidemic streptococcal infections, [Schreier] 354—ab; [McFarland] 714—ab
toxicity, reactions to, [McFarland] 965—ab
BENZAZOLINE: See Tolazoline
BENZEDRINE: See Amphetamine
BENZOCAINE: See Ethyl Aminobenzoate
BENZPYRENE
research on smoking and cancer, United Kingdom, 212
2-BENZYLIMIDAZOLINE: See Tolazoline
BEVERAGES
Alcoholic: See Alcohol; Alcoholism
BICILLIN: See Benzathine Penicillin G
BIERMER'S DISEASE: See Anemia, Pernicious
BILE
acid secretion and serum-cholesterol, effect of dietary oils on, [Lewis] 131—ab
copper and iron before and after intravenous copper and iron in chronic liver disease, [Bertolini] 840—ab
BILE DUCTS
common, cystic dilatation, congenital, especially radiographic studies, [Ravitch] 2310—ab
common, lesions, Sweden, 708
common, movements, image intensifier to study, [Burnett] 1950—ab
common, repair injury to, [Hoffman] 1268—ab
cystic, congenital absence of, [Pines] 953—ab
roentgen study, intravenous, [Goldenberg] 1587—ab

BILIARY TRACT
cancer, Brazil, 1391
cancer, diagnosis, (exfoliative cytology, rapid method of duodenal intubation) [Raskin] 446—ab; (secretin test) [Wenger] 441—ab
colic, diazotization rate of blood bilirubin in diagnosis, [Schalm] 2061—ab
disease, duodenal ulcer caused by? 2080
endoscopy, Germany, 1679
obstruction in newborn, serum transaminase activity in, [Kove & others] *860
roentgen study, status of nonoperative cholecystoangiography, [Cohn] 353—ab
BILIRUBIN in Blood: See Blood bilirubin
BIOFLAVONOIDS
in treatment of bleeding duodenal ulcer, [Weiss] 216—ab
BIOGRAPHY
Carl von Linné's autobiographies, Sweden, 1886
BIOPSIES: See under specific organ, as Liver
BIRTH: See Infants, Newborn; Labor
Multiple: See Pregnancy, multiple; Twins
Premature: See Infants, premature; Labor
Rate: See Vital Statistics
BIRTH CONTROL: See Contraception
BISHYDROXYCOUMARIN
effects on serum uric acid, [Hansen] 1576—ab
BITES: See Insects; Snakebite
BLADDER
cancer, subtotal cystectomy and total bladder regeneration in, [Baker & others] *1178
cancer, treatment, [Anderson] 2319—ab
exstrophied, new therapeutic concept, [Snyder] 1269—ab
Hunner's ulcer, [Kinder] 2320—ab
inflammation, radiation cystitis, [Pool] *854
obstruction of neck, diagnosis, treatment, postoperative care, [Ray & Cervantes] *395
rupture, management of severely injured patient, [Schulte] *2094
tumors, tantalum 182 for, [Jönsson] 961—ab
vesical mucosa after radium for cervical carcinoma, pseudoneoplastic changes, [Natale] 349—ab
vesicoureteral reflux in children, [Jones] 1579—ab; (significance) [Politano] 1821—ab
BLAND-WHITE-GARLAND syndrome, angiocardiographic features of, [Lang] 2076—ab
BLINDNESS
flash, produced by atomic flash, (guest editorial) [Byrnes] 778—E
BLINKING in child, cause, therapy, 137
BLISH, M. ELEANOR, appointed to field staff of Council on Medical Education and Hospitals, 695
BLOCH-SULZBERGER'S DISEASE: See Melanin, pigmentation
BLOOD
absorption of local anesthetics, [Campbell & Adriani] *873
Agammaglobulinemia: See Gamma Globulin
alcohol, interpret tests for intoxication, (Committee report) [Turner & others] *1359
amino acids in malignancy, India, 2168
Aminopherase: See Transaminase
ammonia in liver diseases, [Li] 1578—ab
ammonia intoxication in cirrhosis after chlorothiazide therapy, [Magid & others] *35
antibacterial activity after oral triacetyloleandomycin, erthromycin, potassium penicillin V, and penicillin V, [Kunin] 2071—ab
Bank: See Blood Transfusion
bartonellemia, antibiotics in, [Larrea R.] 1946—ab
bilirubin, diazotization rate in diagnosis of biliary colic, [Schalm] 2061—ab
bilirubin low in kernicterus in premature infants, [Harris] 461—ab
carbon dioxide combining power, test for, 2328
Cells: See Erythrocytes; Leukocytes
changes in multiple myeloma, [Prato] 215—ab; 216—ab
chlorides, hyperchloremic acidosis in chronic pyelonephritis, [Lathem] 215—ab
cholesterol, and bile-acid secretion, effect of dietary oils on, [Lewis] 131—ab
cholesterol and infertility, 980
cholesterol and nutrition, [Picchio] 131—ab
cholesterol and people living in urban and rural districts, Finland, 307
cholesterol changes in hypertension during therapy, [Deming] 322—ab
cholesterol during pregnancy, (reply) [Wetstone] 844
cholesterol, effects of dietary protein and carbohydrate on experimental cholesterolemia and atherogenesis, [Stamler] 976—ab
cholesterol elevated after myocardial infarction, cause, treatment, 844
cholesterol elevated, cheese cause? 1294
cholesterol-globulin complex in multiple myeloma, [Schless] 128—ab
cholesterol, hypercholesteremia incidence in asteroid hyalitis, [Smith] *891
cholesterol, hypercholesteremia induced by cholesterol and dietary fat, in monkey, [Cox] 960—ab
cholesterol, hypercholesteremia, nicotinic acid in, N. N. D., 1773
BLOOD—Continued
cholesterol, hypercholesterolemia and coronary disease, treatment, [Oliver] 439—ab
cholesterol, hypocholesterolergic drug, France, 209
cholesterol, lower by changing food patterns, [Brown & Page] *1989
cholesterol, variability and difficulty of evaluating decholesterolizing agents, as "sitosterols," [Levere] 711—ab
cholinesterase and myasthenia gravis after exposure to insecticides, (replies) [Trimble; and original consultant] 138
Coagulation, Anticoagulants: See Anticoagulants
coagulation, evidence linking atherosclerosis with, Canada, 2291
coagulation factors, Israel, 2044
coagulation, fat intake, and physical activity, United Kingdom, 1682
coagulation, prevention, units of heparin required, 167:1806; Aug. 2, 1958; (correction) 168:1670, Nov. 22, 1958
cold agglutinins elevated, and hemolytic and hypochromic anemia in child, (Diagnostic Problems) [Kushner & Szanto] *1013
complications during ristocetin therapy, [Gangarosa] 1582—ab
cyanocobalamin, significance in liver disease, [Rachmilewitz] 106—ab
diagnostic aids in myocardial infarction, [Durant] 322—ab
Donors: See Blood Transfusion
Dyscrasia: See also specific dyscrasias as Granulocytopenia
dyscrasias, A. M. A. Subcommittee annual report, 1060
factors in syncope in healthy young adults, [Dermksian & Lamb] *1200
Fats: See Blood lipids
fetal, loss with placenta previa, 1168
fibrin, hyperfibrinemia in malignancy, France, 1797
fibrinogen, congenital afibrinogenemia, [van Creveld] 1819—ab
fibrinogen, hypofibrinogenemia, cause, relation to uterus abnormalities, prognosis of pregnancy, 2085
Globulin: See Gamma Globulin; Globulin; Poliomyelitis Immune Globulin
Glucose: See Blood sugar
Groups: See also Rh Factor
groups, ABO incompatibility and hemolytic disease of newborn, [Valentine] 460—ab
groups A and B change? 1833
groups, hazards of parental blood for measles modification, (replies) [Berryhill; and original consultant] 1170
groups in Cyprus, United Kingdom, 2172
groups in Sephardic Jews, Israel, 94
hematology research grants open, 794
Hypogammaglobulinemia: See Gamma Globulin
"in vitro" survival of Toxoplasma gondii in, [Talice] 350—ab
insulin estimation, India, 2168
intrinsic-factor-inhibiting substance in, after oral treatment in pernicious anemia, [Schwartz] 943—ab
isoniazid, early results of isoniazid therapy in relation to, [Vivien] 325—ab
lipids and diet, the physician himself, [McArthur] *1740
lipids, effects of dietary proteins, methionine and vitamins on, in cholesterol-fed cockerels, [Stamler] 976—ab
lipids, idiopathic hyperlipemia, [Nazzaro] 325—ab
lipids, lower by changing food patterns, [Brown & Page] *1989
menstrual, examine for tubercle bacilli in tuberculosis sanatorium, [Pickroth] 2070—ab
mucoproteins and atherosclerosis of Australian aborigine, [Schwartz] 1585—ab
mucoproteins and hexosamine, effect of atherosclerosis and age upon, [Schwartz] 975—ab
mucoproteins in prostatic carcinoma, [Arcadi] 1943—ab
oxytocinase inactivates oxytocin, Austria, 2040
peripheral, failure to prove identity of tumor cells in, [Taylor] 2198—ab
phospholipids, genetic and environmental influences, [Schaefer] 1950—ab
plasma-clearing effect of gastric mucin in healthy and atherosclerotic subjects, [Rossi] 1699—ab
platelets, thrombopathies with congenital cardiopathies, [Alaglile] 326—ab
platelets, thrombopathy and moderate hemophilia, simultaneous in one family, [van Creveld] 1812—ab
platelets, thromboplastin, prothrombin and fibrinogen; hemorrhage and massive transfusion, [Ulin & others] *1971
Poliomyelitis Antibodies in: See Poliomyelitis
potassium, hypokalemia in cascara poisoning, United Kingdom, 316
potassium, primary renal hypokalemia-primary aldosteronism, [Alsted] 1578—ab
BLOOD—Continued
precipitation test and syatemic lupus erythematosus, (reply) [Dubois & others] 813—C
Protein: See also Gamma Globulin; Globulin; Poliomyelitis Immune Globulin
protein changes in chronic filariasis, India, 1798
proteins and nutrition, India, 92
proteins in gastroduodenal ulcer, [Dupuy] 1406—ab
proteins in hepatic cirrhosis, India, 1151
proteins in leishmaniasis, India, 433
proteins in ulcer, influence of protein therapy on, [Dupuy] 1406—ab
proteins, regeneration of, India, 920
prothrombin, therapeutic hypoprothrobinemia during acenocoumarol therapy, [Rullo & others] *743
rupture of normal spleen during delivery, hematologic investigations during convalescence, [Hottinger] 461—ab
sedimentation of leukocytes in lymphosarcoma, reticulosarcoma and malignant lymphogranuloma, [Bellesia] 2075—ab
sedimention rate, asthma affect? 2334
sodium, hypernatremia in atypical heat stroke, [Baxter] 109—ab
studies, metabolic and biochemical changes in normal pregnancy, (Council article) [Macy] *2265
studies, Vanderbilt cooperative study of maternal and infant nutrition, (Council article) [McGanity & others] *2138
sugar, clinical trials with DBI, oral hypoglycemic agent, [Krall] 835—ab
sugar, effect of soluseptasine on, India, 1257
sugar, hypoglycemia, symptoms, treatment, 2330
sugar, hypoglycemic agent: chloropropamide, [Murray] 2074—ab
sugar, hypoglycemic sulfonamides, France, 803
sugar, random glucose levels, evaluation in ambulant women, [Macy & others] *2010
Tests: See also Syphilis, serodiagnosis
tests, analysis of presenile and senile patients with cardio-aortic atherosclerosis, [Rossetti] 970—ab
tests, examination with oxalated blood, 1593
tests, premarital, compulsory, results of epidemiologic study, 289—E
tests, slide latex fixation in diagnosis of rheumatoid arthritis, [Singer & Plotz] *180
thyroid-stimulating hormone in, New Zealand, 1926
Transaminase: See Transaminase
Types: See Blood groups
uric acid, chlorothiazide as hyperuricacidemic agent, [Oren & others] *2128
uric acid, effects of Dicumarol on, [Hansen] 1576—ab
viremia in mumps virus infection, [Overman] 2061—ab
virus in Coxsackie B virus infection [Utz & Shelokov] *264
volume after plasma and blood transfusions, [Wollheim] 1760—ab
BLOOD PRESSURE
brachial and digital, Canada, 1678
fall accompanying reduction in obesity, role of salt in, [Dahl] 322—ab
low, hypotensive sedative from Vinca rosea, India, 1799
Portal: See Portal Vein
pulmonary, frequency of postprimary pulmonary tuberculosis according to, [Mattson] 2298—ab
BLOOD PRESSURE, HIGH
arterial, of atherosclerosis, [Lian] 323—ab
coarctation repair relieves, in man 57, [Kittle & others] *2006
complications, cardiac, [Cornish] 1697—ab
consequence of increased arterial pressure, study rats with hydralazine-treated renal hypertension, [Masson] 2076—ab
degenerative, in the Orient, [Schroeder] 1697—ab
essential, role of dietary sodium in, [Dahl] 323—ab
histology of kidney biopsy specimens in, [Sommers] 970—ab
intrarenal arteriovenous fistula with, literature review, [Milloy] 823—ab
juvenile, with renal disease, nephrectomy in, [Welch] 463—ab
low-sodium diets in, (Council report) [Danowski] *1886
malignant, effectiveness of long-term therapy, [Dustan] 2299—ab
nephrogenic, after operative trauma to renal artery, [McDonald] 451—ab
Portal Hypertension: See Portal Vein
pulmonary, in heart anomalies with arteriosclerosis, pulmonary embolism and myocardial infarction, (Diagnostic Problems) [Kushner & Szanto] *277
severe, medical and surgical treatment, effects on mortality compared, [Perry] 2300—ab
severe, renal function in patients recuperated from, [Caeiro] 819—ab

BLOOD PRESSURE, HIGH—Continued
treatment, 4 year evaluation of agent, [Roberts] 1946—ab
treatment: long-acting oral ganglion blocking agent, [Locket] 1582—ab
treatment: mecamylamine, (India) 209; [Lucchelli] 834—ab
treatment: Pempidine, United Kingdom, 318; [Harington] 1416—ab
treatment, potentiate therapy by use of chlorothiazide, [Rochelle & others] *410
treatment, serum cholesterol changes during, [Deming] 322—ab
BLOOD TRANSFUSION
biological activity of bank blood, 135
biomechanical equipment for long-term preservation of erythrocytes, [Ketchel & others] *404
blood and plasma, blood volume after, [Wollheim] 1700—ab
can Rh factor change without previous pregnancy or? 1833
complications: citrate intoxication, (United Kingdom) 926; [Ludbrook] 1709—ab
complications from contaminated blood, recognition and treatment, [Braude] 836—ab
complications: hemosiderosis, radiologic signs in, [Shanbrom & Zheutlin] *33
complications: hepatitis, Norway, 922
diagnosis and management of gastrointestinal hemorrhage, [Maloney] *1604
exchange, in control of accidental poisoning, [Cann & others] *717; (in children) [Bruton] 1820—ab
exchange, unexplained death from, [Taylor] 340—ab
first use of, 1834
forcible blood injection into arterial system in terminal states, [Radushkevich] 1711—ab
in merchant marine, Netherlands, 2045
in vivo survival of glycerolized and frozen red blood cells, [Tullis & others] *399
intraosseous blood and plasma in children, [Lapshina] 1711—ab
massive, and hemorrhage, [Ulin & others] *1971
packed erythrocytes for liver cirrhosis, India, 1150
parental blood, hazards for measles modification, (replies) [Berryhill; and original consultant] 1170
safety of liquid plasma, statistical appraisal, [Sayman & others] *1735; 1784—E
BLOOD VESSELS
action of acetazolamide on, India, 1800
cerebral arteriovenous anomalies, intracranial hemorrhage in, [Wood] 1272—ab
cerebral occlusive disease, neurosurgical aspects of, [Webster] 334—ab
injuries in supracondylar fractures of humerus in children, [Staples] *730
peripheral complications in diabetes, [Kramer] 2181—ab
roentgen study, angiographic evaluation of cerebral arteriosclerosis, [Tatelman] 352—ab
surgery in aged, outlook for, [Hitchcock] 1267—ab
tumors, management, [Stephenson] 1711—ab
BODY
fat, determination, India, 2292
Weight: See also Obesity
weight disturbances from methylprednisolone, [McMahon & Gordon] *1208
BONE MARROW
biopsy, Austria, 1922
medullary iron in acute rheumatic fever in children, [Bernheim] 1715—ab
proteinic and hematological changes in multiple myeloma, [Prato] 215—ab; 216—ab
BONES: See also specific bones as Humerus
activation of patient with skeletal metastatic neoplasia, [Cummings & Rosenthal] *501
disease, alcohol-induced pain in, [Braun & Shnider] *1882
formation and diseases, symposium on, (Program) (Council article) 520
Fractures: See Fractures
growing, metastatic embryonal rhabdomyosarcoma in, [Caffey] 123—ab
hypophosphatasia, 415—E
intraosseous anesthesia in operations on extremities, [Okhotsky] 1825—ab
intraosseous blood and plasma transfusion in children, [Lapshina] 1711—ab
research grants announced, 80
tumors, osteogenic sarcoma of jaws and facial bones, [Kragh] 2304—ab
tumors, what cytology offers in diagnosis, [Sicard] 127—ab
BOOKS: See also Book Reviews at end of letter B
A. M. A. discontinues publication of Glandular Physiology and Therapy, and Fundamentals of Anesthesia, 1057; 1059
book on medical care by Association of Teachers of Preventive Medicine, review of, (Bureau article) [Bornet] *2025
BOOKS—Continued
Carl von Linné's autobiographies, Sweden, 1800
Gray's Anatomy, centenary celebrated, United Kingdom, 1152
to recommend to patient after premarital examination, [Scholten] *1171
BOSTON UNIVERSITY
grants to, 1558
medical research building planned, 1240
BOTTLE
soft drink bottle in peritoneal cavity, [Hoge & Thedieck] *40
BOTULISM
clinical-neurologic study, [Castedo] 2303—ab
BOUILLON feedings, surgical patient, [Benjamin] 2311—ab
BOXING
hematuria in boxers, [Kleiman] *1633
BRACES
Milwaukee, in operative treatment of scoliosis, [Blount] 327—ab
BRADYCARDIA
on closure of left ventricular-right atrial shunt, [Gerbode] 2187—ab
BRAIN
abscess, 47 cases, [Kerr & others] *868
blood flow and metabolism during acute vascular accidents, effect of vasodilators, [Feruglio] 1822—ab
chemistry, study at U. of Illinois, 1139
damage, contrecoup, with headaches, nose discharge and bilateral nerve deafness; cause, treatment, 2081
damage, meprobamate effect on, [Carter] 337—ab
disease, organic, emotional problems after, treatment, 136; (replies) [Paley; and original consultant] 2086
disease, Pelizaeus-Merzbacher disease, [Tyler] 1270—ab
electroencephalogram abnormalities in hepatic insufficiency and coma, [Bogacz] 456—ab
electroencephalography in control of depth of anesthesia, [Bakulev] 1164—ab
hemorrhage, emotional problems after, treatment, 136
hemorrhage, fatal mistakes in diagnosis of apoplexy, [Marquardsen] 828—ab
hemorrhage in cerebral arteriovenous anomalies, [Wood] 1272—ab
injuries, neurosurgical care of severely injured patient, [Odom] *2087
mucormycosis, [Smith] 2200—ab
occlusive vascular disease, neurosurgical aspects, [Webster] 334—ab
penetrating nuclear radiation effects on, [Gerstner] *381
surgery, lobotomy; 15-year study, [McCausland] 1271—ab
surgery, prefrontal lobotomy, 500 Freeman and Watts patients followed 10-20 years, [Freeman] 335—ab
surgery, resection of temporal lobe for convulsive disorders, [French] 334—ab
surgery, temporal lobectomy effect on mental condition in psychomotor epilepsy, [Alajouanine] 1410—ab
transforaminal curet necropsy of, postmortem tissue diagnosis, [MacHaffie] 1823—ab
transillumination of infant head demonstrated by case of hydranencephaly, [Griffiths] 1713—ab
vascular accidents, non-traumatic, diagnosis and treatment: emphasis on intracranial hemorrhage and "common stroke," [Scott] 2190—ab
BREAST
abscesses, maternal, and antecedent neonatal staphylococcal infection, [Monro] 1275—ab
cancer, adrenalectomy in, correlate clinical results with estrogen production, [Bulbrook] 948—ab
cancer, adrenals and, Portugal, 2170
cancer, advanced, fluoxymesterone therapy in, [Kennedy] 2325—ab
cancer, A. M. A. Subcommittee annual report on, 1060
cancer, androgens in women for, [Vaccato] 950—ab
cancer, diagnostic meaning of calcium metabolism changes after sex steroids in, [Molinatti] 1947—ab
cancer, endocrine relationship to chronic cystic mastitis, [Womack] 2192—ab
cancer, endocrine treatment, [Nogués] 713—ab
cancer, hormonal treatment, sex chromatin in cell nucleus, [Ehlers] 1161—ab
cancer, hypophysectomy for, (United Kingdom) 316; [Baron] 949—ab; (metastatic) [Dugger] 2184—ab
cancer, hypophysectomy in, correlate clinical results with estrogen production, [Bulbrook] 948—ab
cancer in Middletown, U. S. A., [Moore] 2307—ab
cancer in women 35 years of age or younger, [Treves] 1940—ab
BREAST—Continued
cancer, metastasizing, ovariectomy and adrenalectomy in, [Hellström] 829—ab; [Davis] 2306—ab
cancer, metastatic, implant pituitary with yttrium-90 for, United Kingdom, 315
cancer, 1627 cases, [Lavigne] 1816—ab
cancer, oophorectomy in, correlate results with estrogen production, [Bulbrook] 947—ab
cancer, pituitary ablation by means of radioactive seeds, WHO report, 1397
cancer, pregnancy contraindicated after surgery for? 2334
cancer, series of 681 patients, India, 92
cancer, treatment, 1228—E; (reply) [Segaloff] 2297—C
cystic disease, treatment, results; 5 to 18-year survey, [Hendrick] 2063—ab
Feeding: See Lactation
female, occurrence and significance of free tissue fluid in, [Ratzenhofer] 1276—ab
hypertrophy after reserpine, explanation of, 136
inflammation, endocrine relationship to breast cancer, [Womack] 2192—ab
nipple discharges, cytology as diagnostic aid, [Walker] 829—ab
surgery, pregnancy after mastectomy, 1955
tuberculosis, [Yeh] 1707—ab
tumors, sarcoma, [Botham] 714—ab; (Brazil) 802
BREATH; Breathing: See Respiration
BRITISH
doctors, are we making same mistakes made by? British GP thinks so, (Miscellany) 931
Empire Cancer Campaign report, 317
Health Service: See National Health Service
BROADMOOR asylum for criminally insane, facts about, United Kingdom, 98
BROMHIDROSIS
etiology, 1592
BRONCHIECTASIS
bilateral, preparatory treatment and operation, [Spath] 1706—ab
climate and, 474
hypogammaglobulinemia and, [de Meulemeester] 712—ab
reversible, [Nelson] 1949—ab
treatment, indications and safety of bronchoscopy and bronchography, 2083
BRONCHITIS
atypical epithelial changes in mice exposed to cigarette smoke, [Leuchtenberger] 223—ab
chronic, hydrocortisone inhalations for, [Heim] 2197—ab
outdoor occupations and, United Kingdom, 2045
BRONCHOGRAPHY: See Bronchus, roentgen study
BRONCHOSCOPY
indications for and safety of, 2083
BRONCHUS
cancer, analytic investigations, 801 cases, [Wassner] 952—ab
cancer in young persons, [Hanbury] 837—ab
cancer, inoperable, value of radiotherapy in, [Sicher] 353—ab
cancer, primary, interstitial implantation for, [Henschke] 351—ab
cancer, treatment, results, [Burford] 1816—ab
cancer without roentgen findings, [Hansen] 1815—ab
carcinoid adenoma, diagnosis and management, [Sauer & others] *139
carcinoid adenoma, with solitary metastasis and carcinoid syndrome, [Stanford] 838—ab
roentgen study, indications for and safety, 2083
tuberculous tracheobronchial lymph node involvement in maturity, [le Melletier] 110—ab
tumors, fibroma, [Rodé] 437—ab
BRUCELLOSIS
chronic valvular heart disease after, [Peery] 1810—ab
treatment: chloramphenicol with tetracycline, [Parravicini] 125—ab
BRUSH, nylon, [Savill] 2319—ab
BRUTALITY
parental, etiologic factor in first-degree murder, [Duncan & others] *1755
BUERGER'S Disease: See Thromboangiitis obliterans
BURNS
absorption of local anesthetics from, [Campbell & Adriani] *873
chorioretinal, produced by atomic flash, (guest editorial) [Byrnes] 778—E
lower extremity skin coverage in children, [Wynn] *154
third degree, grafts for, remove granulations down to firm yellow base? 134
treatment, India, 806
BURSITIS
calcareous and noncalcareous, about trochanter major, [Leonard] *175

BUSINESS PRACTICE
Business Side of Medical Practice, excerpts from brochure, 818; 935; 1155; 1262; 1401; 1691; 1806; 1932; 2050; 2176
BUSULFAN
treatment of polycythemia vera, [Louis] *1880
BUTYL SULFANILYLUREA (carbutamide): See Sulfonylureas

BOOK REVIEWS

Abnormalities
Congenital Anomalies of Hand and Their Surgical Treatment, [Barsky] 2203
Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, [Jones & Scott] 2079
Adams, F. D., Physical Diagnosis, 2079
Adriani, J., editor, Hospital Planning for Anesthesiologist, (by Dornette) 1729
Aegerter, E., and Kirkpatrick, J. A., Jr., Orthopedic Diseases, 471
Alcoholism, [Pfeffer] 977
Allergy
Mould Fungi and Bronchial Asthma, Volume I, [van der Werff] 470
American Academy of Orthopaedic Surgeons Instructional Course Lectures. Volume XIV, [Raney] 1419
American Association for Health, Physical Education, and Recreation, Fit to Teach: Yearbook on Teacher Health, 1951
American Association of Clinical Chemists, Standard Methods of Clinical Chemistry. Volume II, [Seligson] 226
American College of Chest Physicians, Roentgenology of the Chest, [Rabin] 1728
American Heart Association, Cerebral Vascular Disease: Transactions of Second Conference, [Millikan] 2202
Anatomy
Diagnostic Anatomy, [Gardner] 1590
Handbuch der speziellen pathologischen Anatomie und Histologie. Band 13: Nervensystem. Teil 2. Bandteile A und B, [Lubarsch & others] 1166
Human Dissection, [Lassek] 1730
Synopsis of Surgical Anatomy, [McGregor] 1728
Anderson, M. H., Functional Bracing of Upper Extremities, 1729
Anderson, V. E., Goodman, H. O., and Reed, S. C., Variables Related to Human Breast Cancer, 1727
Anesthesia
Hospital Planning for Anesthesiologist, [Dornette] 1729
Physics for the Anaesthetist, Including Section on Explosions, [Macintosh & others] 359
Athletics and Physical Education
Methods in Physical Education, [Kozman & others] 471
Organization and Administration of Physical Education, [Voltmer & Esslinger] 1420
Atlas
Atlas de technique opératoire chirurgie de la main, [Iselin & others] 356
Atlas der gastroenterologischen Endoskopie, [Boller] 1828
Bacteriology
Bacterial and Mycotic Infections of Man, [Dubos] 2201
Microbiology and Epidemiology, [Thompson] 715
Baron, D. N., Essentials of Chemical Pathology, 817
Barsky, A. J., Congenital Anomalies of Hand and Their Surgical Treatment, 2203
Barton, R. T., Religious Doctrine and Medical Practice, 1591
Bayley, R. H., Electrocardiographic Analysis, Vol. 1, 225
Belding, D. L., Basic Clinical Parasitology, 1730
Benedict, E. B., and Nardi, G. L., The Esophagus, 1590
Bierring, W. L., History of the Department of Internal Medicine, State University of Iowa College of Medicine, 2202
Blood and Hemopoietic System
Circulation: Proceedings of the Harvey Tercentenary Congress, [McMichael] 2327
Etiology and Treatment of Leukemia, [Burdette] 1952
Laboratory Medicine: Hematology, [Miale] 358
Boller, R., Atlas der gastroenterologischen Endoskopie, 1828
Boyd, W., Pathology for the Physician, 358
Bracstrup, C. B., and Wyckoff, H. O., Radiation Protection, 1951
Bredow, M., Medical Assistant, 1165
Brown, J. B., and McDowell, F., Skin Grafting, 1165
Burdette, W. J., editor, Etiology and Treatment of Leukemia, 1952
Calder, R., Medicine and Man: Story of Art and Science of Healing, 1730
Cancer
Advances in Cancer Research, Volume V, [Greenstein & Haddow] 470
Cancer—Continued
Etiology and Treatment of Leukemia: Proceedings of First Louisiana Cancer Conference, [Burdette] 1952
Variables Related to Human Breast Cancer, [Anderson & others] 1727
Cardiovascular System
Advances in Electrocardiography, [Kossmann] 1421
Atrial Arrhythmias, Digitalis and Potassium, [Lown & Levine] 1729
Auscultation of the Heart, [Ravin] 356
Basic Cardiology, [Gumpert] 1831
Cardiovascular Diseases, [Scherf & Boyd] 1728
Cerebral Vascular Disease, [Millikan] 2202
Chronic Bronchitis, Emphysema and Cor Pulmonale, [Stuart-Harris & Hanley] 2201
Electrocardiogram Clinics, [Riseman & Sagall] 1952
Electrocardiographic Analysis. Vol. 1, [Bayley] 225
Fundamentals in Cardiology, [Wild] 133
High Arterial Pressure, [Smirk] 470
Reflexogenic Areas of Cardiovascular System, [Heymans & Neil] 1590
Symposium on Non-Toxaemic Hypertension in Pregnancy, [Morris & Browne] 1293
Cave, E. F., editor, Fractures and Other Injuries, 978
Chemistry
Clinical Enzymology, [Martin] 1831
Essentials of Chemical Pathology, [Baron] 817
Standard Methods of Clinical Chemistry. Volume II, [Seligson] 226
Ciba Foundation Colloquia on Ageing, Volume 4: Water and Electrolyte Metabolism in Relation to Age and Sex, [Wolstenholme & O'Connor] 2327
Communicable Diseases
Die Infektionskrankheiten des Menschen und ihre Erreger, [Grumbach & Kikuth] 358
Infectious Diseases of Children, [Krugman & Ward] 2078
Microbiology and Epidemiology, [Thompson] 715
Practice of Infectious Disease, [Weinstein] 356
Cope, (Sir) **Zachary,** Early Diagnosis of Acute Abdomen, 2203
Council for International Organizations of Medical Sciences, Planning of International Meetings, 2203
Cullen, S. C., and Gross, E. G., Manual of Medical Emergencies, 2203
Deichmann, W. B., and Gerarde, H. W., Signs, Symptoms and Treatment of Certain Acute Intoxications, 715
DePalma, A. F., editor-in-chief, Clinical Orthopaedics. Number Eleven, 1166
Diagnosis
Diagnostic Anatomy, [Gardner] 1590
Early Diagnosis of Acute Abdomen, [Cope] 2203
Modern Treatment Yearbook 1958, [Wakeley] 817
Physical Diagnosis, [Adams] 2079
Digestive System
Atlas der gastroenterologischen Endoskopie, [Boller] 1828
Diseases of Esophagus, [Terracol & Sweet] 977
Diseases of Liver and Biliary System, [Sherlock] 1952
Esophagus: Medical and Surgical Management, [Benedict & Nardi] 1590
Intestinal Obstruction, [Welch] 1419
Modern Trends in Gastroenterology (Second Series), [Jones] 715
Doctor Speaks His Mind, [Lee] 1730
Dornette, W. H. L., Hospital Planning for Anesthesiologist, 1729
Dow, R. S., and Moruzzi, G., Physiology and Pathology of Cerebellum, 977
Dubos, R. J., editor, Bacterial and Mycotic Infections of Man, 2201
Electricity
Medical Electrical Equipment, [Molloy] 1830
Emergencies
Manual of Medical Emergencies, [Cullen & Gross] 2203
Endocrinology
Clinical Endocrinology, [Paschkis & others] 2202
Diseases of Thyroid and Parathyroid Glands, [Ficarra] 2078
Endocrine Pathology of the Ovary, [Morris & Scully] 816
Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, [Jones & Scott] 2079
Enzymes
Clinical Enzymology, [Martin] 1831
Ethics, Medical
Law and Ethics for Doctors, [Hadfield] 1419
Ficarra, B. J., Diseases of Thyroid and Parathyroid Glands, 2078
First Aid
First Aid for Your Infant and Child, [Northrup] 1165
Manual of Medical Emergencies, [Cullen & Gross] 2203
Florey, (Sir) **Howard,** editor, General Pathology Based on Lectures Delivered at the Sir William Dunn School of Pathology, 1421
Francis, J., Tuberculosis in Animals and Man, 133
Freeman, L., So You Want to Be Psychoanalyzed! 225
Gardner, W. D., Diagnostic Anatomy, 1590
Garré-Stich-Bauer Lehrbuch der Chirurgie, [Stich & Bauer] 1165
Genitourinary Tract
Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, [Jones & Scott] 2079
Operative Surgery. Volume 7: Breast, Genito-Urinary System, [Rob & Smith] 359
Gerard, R. W., Mirror to Physiology, 1292
Geriatrics
Ciba Foundation Colloquia on Ageing, Volume 4, [Wolstenholme & O'Connor] 2327
Clinical Orthopaedics. Number Eleven: Orthopaedic Surgery in Geriatric Patient, [DePalma] 1166
Gibbs, F. A., and Stamps, F. W., Epilepsy Handbook, 1730
Goff, C. W., editor, Congenital Anomalies of Hand and Their Surgical Treatment, (by Barsky) 2203
Greenfield, J. G., and others, Neuropathology, 1591
Greenstein, J. P., and Haddow, A., Advances in Cancer Research. Volume V, 470
Grumbach, A., and Kikuth, W., editors, Die Infektionskrankheiten des Menschen und ihre Erreger, 358
Gumpert, T. E., Basic Cardiology, 1831
Gynecology and Obstetrics
Endocrine Pathology of Ovary, [Morris & Scully] 816
Human Parturition: Normal and Abnormal Labor, [Miller & Evans] 1952
Lehrbuch der Gynäkologie, [Martius] 817
Modern Practice of Obstetrics, [Stern & Burnett] 1292
Obstetrics and Gynecology, [Willson & others] 1591
Operative Surgery. Volume 7: Breast, Genito-Urinary System, [Rob & Smith] 359
Pediatric Gynecology with Sections on Urology and Proctology, [Schauffler] 359
Symposium on Non-Toxaemic Hypertension in Pregnancy, [Morris & Browne] 1293
Variables Related to Human Breast Cancer, [Anderson & others] 1727
Hadfield, S. J., Law and Ethics for Doctors, 1419
Hardy, J. D., Pathophysiology in Surgery, 2326
Harrison, T. R., and others, editors, Principles of Internal Medicine, 1292
Harvard Medical School, Fractures and Other Injuries, [Cave] 978
Harvey, William (1578-1657)
Circulation: Proceedings of the Harvey Tercentenary Congress, [McMichael] 2327
Health
Fit to Teach: Yearbook on Teacher Health, [Hein] 1951
Lifetime Health Record, [Rutstein] 1829
Hein, F. V., editor, Fit to Teach, 1951
Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, [Jones & Scott] 2079
Heymans, C., and Neil, E., Reflexogenic Areas of Cardiovascular System, 1590
Higgins, G. A., and Orr, T. G., Jr., Orr's Operations of General Surgery, 1727
Histology
Die neuroallergischen Beziehungen in der Histopathologie der Multiplen Sklerose, [Leboczky] 1828
Handbuch der speziellen pathologischen Anatomie und Histologie. Band 13, Teil 2, Bandteile A und B, [Lubarsch & others] 1166
History of Medicine: See Medical History
Hollingshead, A. B., and Redlich, F. C., Social Class and Mental Illness, 978
Holzel, A., and Tizard, J. P. M., Modern Trends in Pediatrics (Second Series), 978
Hospitals
Hospital Planning for the Anesthesiologist, [Dornette] 1729
Medical Electrical Equipment, [Molloy], 1830
Hurwitz, A., and Degenshein, G. A., Milestones in Modern Surgery, 226
Industrial Hygiene and Toxicology, Volume I, [Patty] 1293
Infectious Diseases: See Communicable Diseases
Insurance
Life Insurance and Medicine, [Ungerleider & Gubner] 2078
Internal Medicine
Principles of Internal Medicine, [Harrison & others] 1292
Iselin, M., and others, Atlas de technique opératoire chirurgie de la main, 356
Jeans, P. C., Wright, F. H., and Blake, F. G., Essentials of Pediatrics, 1951

Jones, F. A., editor, Modern Trends in Gastroenterology (Second Series), 715
Jones, H. W., Jr., and Scott, W. W., Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, 2079
Korkis, F. B., Recent Advances in Oto-laryngology, 226
Kossmann, C. E., editor, Advances in Electrocardiography, 1421
Kozman, H. C., Cassidy, R., and Jackson, C. O., Methods in Physical Education, 471
Krugman, S., and Ward, R., Infectious Diseases of Children, 2078
Laboratory Medicine: Hematology, [Miale] 358
Lanza, A. J., editor-in-chief, Alcoholism, (by Pfeffer) 977
Lassek, A. M., Human Dissection, 1730
Lee, R. I., A Doctor Speaks His Mind, 1730
Lehoczky, T., Die neuroallergischen Beziehungen in der Histopathologie der Multiplen Sklerose, 1828
Levine, S. Z., Anderson, J. A., and others, Advances in Pediatrics, Volume X, 1828
Literature
How to Write Scientific and Technical Papers, [Trelease] 1831
Lown, B., and Levine, H. D., Atrial Arrhythmias, Digitalis and Potassium, 1729
Lubarsch, O., Henke, F., and Rössle, R., editors, Handbuch der speziellen pathologischen Anatomie und Histologie. Band 13, Teil 2, Bandteile A und B, 1166
Lundeen, E. C., and Kunstadter, R. H., Care of the Premature Infant, 133
McGregor, A. L., Synopsis of Surgical Anatomy, 1728
Macintosh, (Sir) Robert, Mushin, W. W., and Epstein, H. G., Physics for Anaesthetist, Including Section on Explosions, 359
Macleod, I., and others, Future of the Welfare State: Seven Oxford Lectures, 357
McMichael, J., editor, Circulation: Proceedings of the Harvey Tercentenary Congress, 2327
Martin, G. J., editor, Clinical Enzymology, 1831
Martius, H., Lehrbuch der Gynäkologie, 817
Massachusetts General Hospital, Fractures and Other Injuries, [Cave] 978
Medical Assistant, [Bredow] 1165
Medical History
History of the Department of Internal Medicine, State University of Iowa College of Medicine, [Bierring] 2202
Human Dissection: Its Drama and Struggle, [Lassek] 1730
Medicine and Man: Story of Art and Science of Healing, [Calder] 1730
Medical Jurisprudence
Forensic Medicine, [Simpson] 817
Law and Ethics for Doctors, [Hadfield] 1419
Medical Records
Lifetime Health Record, [Rutstein] 1829
Medicine
A Doctor Speaks His Mind, [Lee] 1730
Life Insurance and Medicine, [Ungerleider & Gubner] 2078
Medicine and Man: Story of Art and Science of Healing, [Calder] 1730
Negroes and Medicine, [Reitzes] 1829
Religious Doctrine and Medical Practice, [Barton] 1591
Meetings
Planning of International Meetings, [Council for International Organizations of Medical Sciences] 2203
Menninger, K., Theory of Psychoanalytic Technique, 1729
Metabolism
Ciba Foundation Colloquia on Ageing, Volume 4: Water and Electrolyte Metabolism in Relation to Age and Sex, [Wolstenholme & O'Connor] 2327
Miale, J. B., Laboratory Medicine: Hematology, 358
Milestones in Modern Surgery, [Hurwitz & Degenshein] 226
Miller, N. F., Evans, T. N., and Haas, R. L., Human Parturition, 1952
Millikan, C. H., editor, Cerebral Vascular Disease, 2202
Molloy, R. E., editor, Medical Electrical Equipment, 1830
Morris, J. M., and Scully, R. E., Endocrine Pathology of Ovary, 816
Morris, N. F., and Browne, J. C. M., editors, Symposium on Non-Toxaemic Hypertension in Pregnancy, 1293
Negroes and Medicine, [Reitzes] 1829
Neurology
Cerebral-Palsied Child: Guide for Parents, [Phelps & others] 1830
Cerebral Palsy in Childhood, [Woods] 816
Cerebral Vascular Disease, [Millikan] 2202
Die neuroallergischen Beziehungen in der Histopathologie der Multiplen Sklerose, [Lehoczky] 1828
Epilepsy Handbook, [Gibbs & Stamps] 1730
Neurology—Continued
Handbuch der speziellen pathologischen Anatomie und Histologie. Band 13: Nervensystem. Teil 2, Bandteile A und B, [Lubarsch & others] 1166
Neuropathology, [Greenfield & others] 1591
Physiology and Pathology of Cerebellum, [Dow & Moruzzi] 977
Northrup, E., First Aid for Your Infant and Child, 1165
Nurses and Nursing
Medical Assistant, [Bredow] 1165
Obstetrics: See Gynecology and Obstetrics
Ophthalmology
Systemic Ophthalmology, [Sorsby] 1830
Orr's Operations of General Surgery, [Higgins & Orr] 1727
Orthopedics
American Academy of Orthopaedic Surgeons Instructional Course Lectures. Volume XIV, [Raney] 1419
Clinical Orthopaedics. Number Eleven, [DePalma] 1166
Fractures and Other Injuries, [Cave] 978
Functional Bracing of the Upper Extremities, [Anderson] 1729
Orthopedic Diseases, [Aegerter & Kirkpatrick] 471
Otorhinolaryngology
Hearing Therapy for Children [Streng] 2326
Recent Advances in Oto-laryngology, [Korkis] 226
Pack, G. T., and Ariel, I. M., Tumors of the Soft Somatic Tissues, 1420
Parasitology
Bacterial and Mycotic Infections of Man, [Dubos] 2201
Basic Clinical Parasitology, [Belding] 1730
Mould Fungi and Bronchial Asthma, Volume I, [van der Werff] 470
Paschkis, K. E., Rakoff, A. E., and Cantarow, A., Clinical Endocrinology, 2202
Pathology
Essentials of Chemical Pathology, [Baron] 817
General Pathology Based on Lectures Delivered at the Sir William Dunn School of Pathology, [Florey] 1421
Neuropathology, [Greenfield & others] 1591
Pathology for the Physician, [Boyd] 358
Principles of Internal Medicine, [Harrison & others] 1292
Text on Systemic Pathology. Volume 1, [Saphir] 1421
Patton, E. F., Pediatric Index: Guide to Symptomatological Diagnosis and Current Management, 1420
Patty, F. A., editor, Industrial Hygiene and Toxicology. Volume I, 1293
Pediatrics
Advances in Pediatrics. Volume X, [Levine & others] 1828
Care of the Premature Infant, [Lundeen & Kunstadter] 133
Cerebral-Palsied Child: Guide for Parents, [Phelps & others] 1830
Cerebral Palsy in Childhood, [Woods] 816
Essentials of Pediatrics, [Jeans & others] 1951
First Aid for Your Infant and Child, [Northrup] 1165
Hearing Therapy for Children, [Streng] 2326
Infectious Diseases of Children, [Krugman & Ward] 2078
Modern Trends in Pediatrics (Second Series), [Holzel & Tizard] 978
Pediatric Gynecology with Sections on Urology and Proctology, [Schauffler] 359
Pediatric Index: Guide to Symptomatological Diagnosis and Current Management, [Patton] 1420
Surgery in Infancy and Childhood, [White & Dennison] 471
Pfeffer, A. Z., Alcoholism, 977
Pharmacology and Therapeutics
Atrial Arrhythmias, Digitalis and Potassium, [Lown & Levine] 1729
Modern Treatment Yearbook 1958, [Wakeley] 817
Phelps, W. M., Hopkins, T. W., and Cousins, R., Cerebral-Palsied Child: Guide for Parents, 1830
Physics for Anaesthetist, [Macintosh & others] 359
Physiology
Mirror to Physiology, [Gerard] 1292
Planning of International Meetings, [Council for International Organizations of Medical Sciences] 2203
Psychiatry
Social Class and Mental Illness, [Hollingshead & Redlich] 978
Psychoanalysis
So You Want to Be Psychoanalyzed! [Freeman] 225
Theory of Psychoanalytic Technique, [Menninger] 1729
Rabin, C. B., editor, Roentgenology of the Chest, 1728
Radiation Protection, [Baestrup & Wyckoff] 1951
Raney, R. B., editor, American Academy of Orthopaedic Surgeons Instructional Course Lectures. Volume XIV, 1419
Ravin, A., Auscultation of the Heart, 356
Reitzes, D. C., Negroes and Medicine, 1829
Religious Doctrine and Medical Practice, [Barton] 1591
Respiratory Tract
Chronic Bronchitis, Emphysema and Cor Pulmonale, [Stuart-Harris & Hanley] 2201
Rheumatic Disease
Progress in Arthritis, [Talbott & Lockie] 357
Riseman, J. E. F., and Sagall, E. L., Electrocardiogram Clinics, 1952
Rob, C., and Smith, R., editors, Operative Surgery. Volume 7, 359
Roentgenology of the Chest, [Rabin] 1728
Rutstein, D. D., Lifetime Health Record, 1829
Saphir, O., editor, Text on Systemic Pathology. Volume 1, 1421
Schauffler, G. C., Pediatric Gynecology with Sections on Urology and Proctology, 359
Scherf, D., and Boyd, L. J., Cardiovascular Diseases, 1728
Schools
Fit to Teach, [Hein] 1951
Schools, Medical
History of the Department of Internal Medicine, State University of Iowa College of Medicine, [Bierring] 2202
Secretaries
Medical Assistant, [Bredow] 1165
Seligson, D., editor, Standard Methods of Clinical Chemistry. Volume II, 226
Sex
Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, [Jones & Scott] 2079
Sheriock, S., Diseases of Liver and Biliary System, 1952
Simpson, K., Forensic Medicine, 817
Smirk, F. H., High Arterial Pressure, 470
Social Class and Mental Illness, [Hollingshead & Redlich] 978
Socialism
Future of Welfare State: Seven Oxford Lectures, [Macleod & others] 357
Socialized Medicine
Law and Ethics for Doctors, with a Section on General Practice in the National Health Service, [Hadfield] 1419
Sollars, R. E., editor, Functional Bracing of Upper Extremities, (by Anderson) 1729
Sorsby, A., editor, Systemic Ophthalmology, 1830
Stern, D. M., and Burnett, C. W. F., Modern Practice of Obstetrics, 1292
Stich, R., and Bauer, K. H., editors, Garrè-Stich-Bauer Lehrbuch der Chirurgie, 1165
Streng, A., Hearing Therapy for Children, 2326
Stuart-Harris, C. H., and Hanley, T., Chronic Bronchitis, Emphysema and Cor Pulmonale, 2201
Surgery
Atlas de technique opératoire chirurgie de la main, [Iselin & others] 356
Atlas der gastroenterologischen Endoskopie, [Boller] 1828
Congenital Anomalies of Hand and Their Surgical Treatment, [Barsky] 2203
Diseases of Esophagus, [Terracol & Sweet] 977
Esophagus, [Benedict & Nardi] 1590
Garrè-Stich-Bauer Lehrbuch der Chirurgie, [Stich & Bauer] 1165
Illustrated Preoperative and Postoperative Care, [Thorek] 1831
Intestinal Obstruction, [Welch] 1419
Milestones in Modern Surgery, [Hurwitz & Degenshein] 226
Operative Surgery. Volume 7, [Rob & Smith] 359
Orr's Operations of General Surgery, [Higgins & Orr] 1727
Pathophysiology in Surgery, [Hardy] 2326
Skin Grafting, [Brown & McDowell] 1165
Surgery in Infancy and Childhood, [White & Dennison] 471
Synopsis of Surgical Anatomy, [McGregor] 1728
Talbott, J. H., and Lockie, L. M., editors, Progress in Arthritis, 357
Technologists
Medical Assistant, [Bredow] 1165
Terracol, J., and Sweet, R. H., Diseases of Esophagus, 977
Thompson, L. R., Microbiology and Epidemiology, 715
Thorax
Roentgenology of the Chest, [Rabin] 1728
Thorek, P., Illustrated Preoperative and Postoperative Care, 1831
Toxicology
Industrial Hygiene and Toxicology, Volume I, [Patty] 1293
Signs, Symptoms and Treatment of Certain Acute Intoxications, [Deichmann & Gerarde] 715

Trauma
Fractures and Other Injuries, [Cave] 978
Treisse, S. F., How to Write Scientific and Technical Papers, 1831
Tuberculosis
Tuberculosis in Animals and Man, 133
Tumors
Tumors of Soft Somatic Tissues, [Pack & Ariel] 1420
Ungerleider, H. E., and Gubner, R. S., editors, Life Insurance and Medicine, 2078
Urology: See Genitourinary Tract
van der Werff, P. J., Mould Fungi and Bronchial Asthma, Volume I, 470
Voltmer, E. F., and Esslinger, A. A., Organization and Administration of Physical Education, 1420
Wakely, Sir Cecil, editor, Modern Treatment Yearbook 1958, 817
Weinstein, L., Practice of Infectious Disease, 356
Welch, C. E., Intestinal Obstruction, 1419
White, M., and Dennison, W. M., Surgery in Infancy and Childhood, 471
Wild, J. B., Fundamentals in Cardiology, 133
Willson, J. R., and others, Obstetrics and Gynecology, 1591
Wolstenholme, G. E. W., and O'Connor, M., editors, Ciba Foundation Colloquia on Ageing, Volume 4, 2327
Woods, G. E., Cerebral Palsy in Childhood, 816

C

CADAVERS
inadequate supply, 1502
CALCIFICATION
in gastrointestinal malignancy, [Matthews] 332—ab
intracranial, after tuberculous meningitis in children, [Lorber] 958—ab
of adrenals, significance and therapy in 3-year-old girl, (reply) [Goldzieher] 1170
CALCIUM
absorption, vitamin D, and sunbathing, 1953
Carbimide: See Carbimide
Disodium Edathamil: See Edathamil
in etiology of arteriosclerosis, 1297
intake, relation to muscle cramps, 2206
metabolism changes, diagnostic meaning after sex steroids in mammary and prostatic cancer, [Molinatti] 1947—ab
metabolism, psoriasis relationship, 716
restriction to prevent urinary calculi after paralytic poliomyelitis, [Plum] *1302
trochanteric syndrome, calcareous and noncalcareous tendonitis and bursitis, [Leonard] *175
urinary excretion in patients with calcium stone of renal origin, [Hodgkinson] 1820—ab
utilization from dried and fresh milk, relation of intake to teeth formation and prevention of caries, 844
CALORIES
skin absorption of, 1169
CANADA
hospitals approved for internships in, 553
medical education in, 58th annual report, 1459
CANCER
after irradiation, United Kingdom, 2295
breast and genital, A. M. A. Subcommittee annual report on, 1060
British Empire Cancer Campaign report, 317
carcinogenesis, France, 1255
carcinogens fixed by histamine and noncarcinogens not so fixed, France, 309
Diagnosis: See also specific organ or region
diagnosis, palpable cervical lymph nodes, [Sage] *496
effusions in, effect of prednisone on, [Franco & others] *1645
etiology: endocrine carcinogenesis, New Zealand, 210
etiology: possible role of smegma in cancer of cervix, [Heins] 2312—ab
hyperfibrinemia in, France, 1797
in Africa, United Kingdom, 928
in Children: See Children
metastases of retina, case report and pathology, [Kennedy] 1283—ab
metastases, pulmonary, France, 309
metastasis to cancer, [Gore] 1724—ab
metastatic, alcohol-induced pain in, [Braun & Shnider] *1882
metastatic, from thyroid, treatment, 1953
metastatic, in pelvis from rectum, treatment, 472
metastatic, mammary, implant pituitary with yttrium-90 for, United Kingdom, 315
metastatic, mammary, ovariectomy and adrenalectomy in, [Hellström] 829—ab; [Davis] 2306—ab
metastatic, ocular, treatment, [Buxeda] 345—ab
metastatic, of breast, transection of hypophyseal stalk for, [Dugger] 2184—ab
metastatic, skeletal, activation of patient with, [Cummings & Rosenthal] *501
CANCER—Continued
mortality, report on, 299
of stomach after gastric resection for peptic ulcer, [Cote] 1160—ab
papillary, of choroid plexus, [Portugal] 2190—ab
plasma amino acids in, India, 2168
precancerous condition: colon polyps, Brazil, 430
precancerous conditions: pilonidal cysts, [Matt] 2311—ab
public's views on, United Kingdom, 1573
research and treatment, Hunter Radiation Therapy Center dedicated, Conn., 1665
research grants by USPHS, 911
smoking and, research on, United Kingdom, 212
survival, [Archibald] 1930—C
Treatment: See also specific organ or region
treatment, cobalt-60 for buccal cancer, [Stuhl] 1824—ab
treatment, India, 1925
treatment, interstitial radiation of pituitary with yttrium 90, [Dogliotti] 1289—ab
treatment of advanced type, E-39, [Brunschwig] 964—ab
CANDIDA: See Monilia; Moniliasis
CAPILLARIES
hemorrhagic disorder with antihemophilic globulin deficiency, [Valberg] 2180—ab
CARBAZOCHROME
control bleeding at operation, [Calnan] 1160—ab
CARBIMIDE
citrated calcium, in alcoholism, [Mitchell] *2008
CARBOHYDRATES
dietary, effects on cholesterolemia and atherogenesis in cockerels on high-fat, high-cholesterol mash, [Stamler] 976—ab
metabolism and injury, India, 1799
CARBON DIOXIDE
combining power, test for, 2328
CARBON TETRACHLORIDE
toxicity: poisoning in 2 hairdressers, [Warshaw] 710—C
CARBONIC ANHYDRASE
Inhibitors: See Acetazolamide
CARBUTAMIDE: See Sulfonylureas
CARCINOID
bronchial adenoma with solitary metastasis and functioning carcinoid syndrome, [Stanford] 838—ab
functioning, diagnosis, management, [Sauer & others] *139
functioning, syndrome, with scleroderma, [Zarafonetis] 946—ab
CARCINOMA: See Adenocarcinoma; Cancer; Choriocarcinoma
Argentaffin: See Carcinoid
CARDIOVASCULAR DISEASE
congestive decompensation, correlation with hyperaldosteronism, [di Perri] 975—ab
degenerative, in the Orient, [Schroeder] 1697—ab
detection, mobile unit x-ray survey, [Feig] 841—ab
Hypertensive: See Blood Pressure, High
in arachnodactyly, [van Buchem] 1698—ab
nonsyphilitic interstitial keratitis and bilateral deafness with, [Eisenstein] 108—ab
CARDIOVASCULAR SYSTEM
effects of type A influenza on, [Walsh] 1809—ab
factors in syncope in healthy young adults, [Dermksian & Lamb] *1200
intracranial arteriovenous aneurysms effects on, [Hösk] 335—ab
research institute at U. of California, 1380
roentgen features of Bland-White-Garland syndrome, [Lang] 2076—ab
roentgen study, selective, in perforation of heart during catheterization, [Escher] 1696—ab
CAROTID GLAND
tumors, [Basto] 2186—ab
CAROTID SINUS
stimulation affect paroxysmal atrial fibrillation? 1169
CARPAL TUNNEL SYNDROME
[Lyons] 1700—ab
CARROLL studies on costs of medical education, 1472
CASCARA poisoning, United Kingdom, 316
CASTLE'S INTRINSIC FACTOR: See Intrinsic Factor
CASTRATION: See Sterilization, Sexual
CASUALTIES
mass, management and Flint tornado, [Lyttle] 1826—ab
CATARACT
experimental, India, 2293
surgery for immature cataract, 2207
surgery, isolation stress in, [Ziskind] *1427
Werner's syndrome, autopsied case, [Perloff] 325—ab
CATHARTICS
cascara poisoning, United Kingdom, 316
CATHETERIZATION: See also under Heart
of aorta, percutaneous left ventricular puncture with, [Fleming] 447—ab
of hepatic vein to determine portal pressure by direct puncture during operation, [Bücherl] 452—ab
CATHETERS
indwelling, in treatment of perineal urethral diverticulum after ischium removal, [Comarr & Bors] *2000
CATHOMYCIN: See Novobiocin
CELLS
cytodiagnosis in cancer of cervix, [Cutts] 337—ab; [Berg] 1161—ab
cytologic-colposcopic observations of ectocervix of pregnancy, [Lang] 457—ab
cytologic examination of nipple discharges as diagnostic aid, [Walker] 829—ab
cytologic observations on systemic involvement in Whipple's disease, [Sieracki] 2199—ab
cytologic screening for uterine cancer, (through physicians' offices) [Calabresi & others] *243 (United Kingdom) 2174
cytomegalic-inclusion disease in adult, [Fisher] 349—ab
esophageal cytology by gauze-sponge smear technique, [Hershenson & others] *1871
exfoliative cytology in diagnosis of cancer of pancreas, biliary tract and duodenum, [Raskin] 440—ab; [Wenger] 441—ab
exfoliative cytology of stomach, Brazil, 1254
Inter-Society Cytology Council meeting, 1384
L. E.: See Lupus Erythematosus
nucleus, sex chromatin in, after hormones for mammary carcinoma, [Ehlers] 1161—ab
optimum spacing of repeat follow-up of Papanicolaou smears, [Schulz & others] *248
Papanicolaou smear in diagnosis of carcinoma of uterine cervix and fundus, [Anderson] 830—ab
somatic, chromatic mass in nuclei to determine sex, India, 1924
vaginal cytology, India, 2041; (and uterine bleeding) 2292
what cytology offers in diagnosis of bone tumors, [Sicard] 127—ab
CEMENT, pneumonoconiosis from, [Baader] 1721—ab
CENSUS
region and states, internships by, 523; 524
CEPHALALGIA
spinal-tap, technique to avoid, [Brocker] *261; (correction) 913
CEREBELLUM
ataxia, acute, of undetermined origin in childhood, [Walcher] 1941—ab
disturbances in Refsum's syndrome, United Kingdom, 927
CEREBROSPINAL FLUID
neuraminic acid deficiency in schizophrenia, [Bogoch] 1411—ab
virus in Coxsackie B virus infection, [Utz & Shelokov) *264
CESAREAN SECTION
analysis of 1344, India, 2169
evaluation of newborn infant, [Apgar & others] *1985
for cephalopelvic disproportion after previous vaginal deliveries, [Davila] 2069—ab
previous, labor after, India, 2042
CHEESE cause elevated serum cholesterol level? 1294
CHEMICALS
A. M. A. Chemical Laboratory annual report, 1063
eye injuries, water in emergency treatment of, (Council report) 47
identification of hazardous ingredients, draft model bill requiring proper labelling, 1062
tests for intoxication, interpretation of, (Committee report) [Turner & others] *1359
CHEMODECTOMA
of carotid body, [Basto] 2186—ab
CHEMOPALLIDECTOMY
two years' experience with, [Paxton & Dow] *755
CHEMOTHERAPY: See also under specific drugs
in pulmonary tuberculosis of doubtful activity, United Kingdom, 212
of choriocarcinoma and related trophoblastic tumors in women, [Hertz & others] *845; 894—E
resected tuberculous lung lesions after, pathology and bacteriology, [Cotter] 713—ab
CHEST: See Thorax
CHICAGO MEDICAL SCHOOL
speakers bureau organized by, 294
10 years accredited and approved, 2029
CHICKENPOX
effects on primary tuberculosis, (Brazil) 430; [Moraes] 711—ab
neonatal, case report with isolation of virus, [Ehrlich] 1277—ab
CHILDREN
accidents, survey, [Fowler] 1826—ab

CHILDREN—Continued
adenovirus infections in, comments on vaccination, [Evans] 2077—ab
A. M. A. Committee on Child Care, annual report, 1108
American youth, physical fitness, annual report, 1076
appendicitis in, 1,358 cases, [Longino] 1279—ab
aseptic meningitis in Manitoba, [Wilt] 339—ab
asthma in, Denmark, 919
asthma in, pulmonary atelectasis in, [Luhr] 2194—ab
asthmatic, follow-up on fate of 298, [Ryssing] 1942—ab
asthmatic, physical conditioning program for, [Scherr & Frankel] *1996
athletics for, competitive, [Hoxie] *1439
athletics for, desirable, [Maksim] *1431
athletics for, educational aspects of, [Hein] *1434
blinking in, cause, therapy, 137
cancer (bronchogenic) in, [Hanbury] 837—ab
cancer in, adrenocortical, with excessive aldosterone production and Cushing syndrome, [Jackson] 1701—ab
cerebellar ataxia (acute) of undetermined origin in, [Walcher] 1941—ab
Coxsackie infection serious in, [Hosier] 1941—ab
determine genetic sex in, reliability of polymorphonuclear leukocyte morphology, [Cooper] 831—ab
diabetes in, nutritional management, (Council report) [Jackson] *42
diabetic, insulin-producing capacity of pancreas of, [Klein] 1718—ab
epilepsy in, acetazolamide for, [Holowach] 955—ab
fitness programs, implications of longitudinal research, [McCammon & Sexton] *1440
growth, statistics on, 2159
heart disease in, bacterial endocarditis in, [Cutler] 2316—ab
hemolytic and hypochromic anemia and elevated cold agglutinins in 7-year-old, (Diagnostic Problems) [Kushner & Szanto] *1013
hepatosplenomegaly in, Brazil, 1254
Hospitals for: See Hospitals, children's
humerus fractures in, supracondylar, complications and problems of traction treatment, [Staples] *730
hydroceles (primary) in, pathogenesis and treatment, [McKay] 1936—ab
hyperthyroidism in, [Hyde] 1718—ab
hypovitaminosis C and osteomyelitis in, [della Casa] 1819—ab
iatrogenic diseases in, 895—E
in hospitals, (United Kingdom) 809; 1376—E
inguinal hernias in, early surgery for, [Kiesewetter] 1711—ab
"insulitis" in early juvenile diabetes, [LeCompte] 2199—ab
intestinal protozoa and helminth acquisition by, in Egypt, [Kuntz] 1282—ab
intraosseous blood and plasma transfusion in, [Lapshina] 1711—ab
juvenile delinquency, United Kingdom, 1153
Korean, admitted to United States, A. M. A. resolution on, 70; 2150
leukemia evolution in course of treatment, [Chaptal] 960—ab
lower extremity skin coverage in, [Wynn] *154
megacolon and its treatment in, [Doletski] 342—ab
myasthenia gravis in, [Sampayo] 1282—ab
myopia in, dietary treatment, [Gardiner] 346—ab
nephritis in, (Norway) 310; (acute glomerular, India) 2043
nephrolithiasis in, diagnosis, [Diligenskaya] 341—ab
nephrosis in, prolonged intermittent steroids for, [Lange & others] *377
pericarditis in, acute benign, [Bono] 833—ab
peritonitis in, diffuse bacterial, intraperitoneal oxytetracycline and tetracycline for, [Soave] 965—ab
phenylketonuria in, chemical and clinical observations during treatment, [Berry] 462—ab
poisoning, accidental, control of, [Cann & others] *717
poisoning, exchange transfusion for, [Bruton] 1820—ab
poisoning from salicylates, [Cann] 1577—ab
portal venography in, India, 921
postpneumonic lung abscess in, lobectomy for, [Moore] 2308—ab
postpneumonic pseudo air cysts in, [Schlager] 1817—ab
pulmonary tuberculosis in; incidence of morbidity and disorders secondary to serofibrinous pleurisy in, before and after antibiotic era, [Batini] 2317—ab
CHILDREN—Continued
renal disease (chronic) in, correlate clinical findings with morphology, [Vernier] 1942—ab
respiratory house-dust allergy in, [Mando] 1720—ab
respiratory illness epidemic in, effect of influenza immunization on, [Glazier] 460—ab
rheumatic fever (acute) in, medullary iron in, [Bernheim] 1715—ab
school, accidents among, Mich., 419
school, hearing screening test method for, 1832
school, physical examination for, tuberculin test in, (replies) [Faber; and original consultant] 984
Sigmamycin in pediatrics, [Feider] 2318—ab
significance of persistent and recurrent urinary infection in, [Forsythe] 2320—ab
sleeping positions of, especially lying on stomach, 1592
small, examination for muscle weakness in, [Johnson] *1306
staphylococcic pneumonia in, [Hendren & Haggerty] *6; (cortisone for) [Bühler] 222—ab
staphylococcus empyema in, [Sia] 1412—ab
surgical ascariasis in, 50 cases, [Fernando] 1407—ab
traineeships in child psychiatry, Mass., 1140
tuberculous meningitis in, intracranial calcification after, [Lorber] 958—ab
tuberculous meningitis in, treatment, [Shvedova] 1717—ab
tumors in, hemangiomas, conservative treatment, [Blackfield] 1710—ab
tumors in, lymphangioma of genitalia, [Gueukdjian] 1279—ab
tumors in, lymphosarcoma, [Rosenberg] 1943—ab
tumors in, recurrent pheochromocytoma in previously treated child, [Cane] 464—ab
ulcer disease in, [Hatfield] 2192—ab
under 5, poliovirus in, United Kingdom, 2296
vesicoureteral reflux in, [Jones] 1579—ab; (significance) [Politano] 1821—ab
virus infections of lower respiratory tract and Stevens-Johnson syndrome in, [Hölscher] 959—ab
young, obesity in, treatment, 1167
young, poliomyelitis antibodies before and after vaccination, [Buser] 220—ab
CHLORAMPHENICOL
clinical trials with, India, 1256
hazards of therapy, [Herrell] *1875
treatment plus tetracycline in brucellosis, [Parravicini] 125—ab
CHLORIDES
hyperchloremic acidosis in chronic pyelonephritis, [Lathem] 215—ab
CHLOROMYCETIN: See Chloramphenicol
CHLOROPHYLLINS harmful? 2334
6-CHLOROPURINE
treatment of leukemia, clinical evaluation, [Ellison] 1584—ab
CHLOROQUINE
phosphate therapy, corneal complication of, [Zeller & Deering] *2263
treatment of active rheumatoid arthritis, [Eriendsson] 964—ab
treatment of arthritis, Denmark, 208; [Eriendsson] 964—ab
CHLOROTHIAZIDE
ammonia intoxication in cirrhosis treated with, [Magid & others] *35
as hyperuricacidemic agent, [Oren & others] *2128
clinical and laboratory studies with, [Watson] 468—ab; (correction) 1146
clinical evaluation as oral diuretic, [Herrmann] 2194—ab
effects on renal electrolyte excretion, [Lassen] 2196—ab
effects on water and electrolyte excretion in preeclampsia, [de Alvarez & O'Lane] *2226
potentiate antihypertensive therapy by, [Rochelle & others] *410
toxicity: purpura, [Jaffe & Kierland] *2264
treatment of cardiac edema, [Richterich] 2194—ab
treatment of edema, [Michelsen] 2196—ab
treatment of edema in pregnancy, [Chesley] 2071—ab
CHLORPROMAZINE
toxicity: jaundice, clinical course, hepatic function tests, pathology, [Gebhart] 107—ab
toxicity: jaundice, Israel, 2044
CHLORPROPAMIDE: See Sulfonylureas
CHLORQUINALDOL
treatment of giardiasis, Brazil, 1391
CHLOTRIDE: See Chlorothiazide
CHOCOLATE, caries-producing potential of, [Mueller] 436—C
CHOL—; CHOLE—: See Bile Ducts; Biliary Tract; Gallbladder
CHOLERA
outbreak in Nepal, 201
CHOLESTEROL: See also Blood cholesterol
dietary, and fat, hypercholesteremia induced in monkeys by, [Cox] 969—ab
fed cockerels, effects of dietary proteins, methionine and vitamins on plasma lipids and atherogenesis in, [Stamler] 976—ab
high, high-fat mash, effects of dietary protein and carbohydrate on cholesterolemia and atherogenesis in cockerels on, [Stamler] 976—ab
CHOLINESTERASE: See Anticholinesterase
CHOREA
acquired choreiform movements, chemopallidectomy for, [Faxton & Dow] *755
rheumatic fever and, connection between, France, 91
CHORIOADENOMA
chemotherapy of, [Hertz & others] *845; 894—E
CHORIOCARCINOMA
related throphobiastic tumors in women and, chemotherapy of, [Hertz & others] *845; 894—E; (folic acid and purine antagonists) [Li] 1416—ab
CHORIORETINITIS
diagnostic importance in congenital toxoplasmosis, [Fair] *250
CHOROID
chorioretinal burns produced by atomic flash, (guest editorial) [Byrnes] 778—E
plexus, papillary carcinoma of, [Portugal] 2190—ab
CHROMATIN: See Sex chromatin
CHROMOSOMAL SEX: See under Sex
CHRONICALLY ILL: See Disease, chronic
CHYMAR: See Chymotrypsin
CHYMOTRYPSIN
desoxyribonuclease with, to reduce sputum viscosity, United Kingdom, 2173
CIGARETTES: See Tobacco
CITIZENSHIP: See also United States citizens
doctor's place in public affairs, (Miscellany) [Judd] *99
CITRATES
intoxication, (United Kingdom) 926; [Ludbrook] 1709—ab
CITY—FARM WEEK
annual report of PR Department on, 1651
CIVIL AERONAUTICS ADMINISTRATION (CAA): See Aviation
CIVIL DEFENSE: See also Disasters
A. M. A. Council on National Defense, annual report, 1068
Civil Defense Review, publication of, Council report on, 1072
Commission on National Emergency Medical Care Plan, annual report, 1071
conference for county societies (program) (Council conference) 906; (annual report on) 1071; (highlights) [Medicine at Work] 1897
consolidate Federal Civil Defense Administration and Office of Defense Mobilization, 1070
counteract mock alert shortages with substitutions, [Medicine at Work] 773
elevation in FCDA of health and medical affairs position, 1070
emergency hospital unit for, Colo., 2155
evaluate task force material in emergency medical care study, [Medicine at Work] 773
health services, proposed FCDA delegation of responsibilities for, 1070
Joint Committee on Medical Education for National Defense, reports, 1072; 1542
medical, activities, annual report on, 1069
medical preparedness, [Hays] *254
national conference, annual report on, 1071
resolution that A. M. A. recommend plan to use reserve units and individuals to supplement operations, 2150
workshop sessions, [Medicine at Work] 773
CLAMS, hard-shelled, allergy to, 982
CLAUDICATION
intermittent, vitamin E for, [Livingstone] 2195—ab
CLERGYMEN: See Religion
CLERKSHIP
clinical, for senior medical students to replace first year interns, A. M. A. resolution on, 65
clinical, training program in Army, 1536
CLIMACTERIC: See Menopause
CLIMATE
emphysema, bronchiectasis and, 474
CLINIC on recognition and management of respiratory acidosis, (Illustrated Film Reviews) [Smart & others] *2054
CLINICS
teen-age, 288—E
CLOACA
with non-adrenal female pseudohermaphroditism, [Sieber] 2072—ab
COBALT
radiation in primary failure of anterior pituitary with irregular menstruation and sterility? 1732
radioactive, diagnostic value of radioactive vitamin B_{12}, [Pitney] 442—ab

COBALT—Continued
radioactive, for buccal cancers, trial application, [Stuhl] 1824—ab
radioactive, Schilling test in diagnosis of pernicious anemia and allied conditions, [Abels] 442—ab
COCAINE
absorption of local anesthetic, [Campbell & Adriani] *873
CODEINE
morphine liberation from, [Pærregaard] 1721—ab
COFFIN, LONNIE A., A. M. A. General Practitioner award to, (photos) 2147—E; 2274
COGAN'S SYNDROME: See Keratitis, interstitial
COHN ADL BLOOD FRACTIONATOR
biomechanical equipment for long-term preservation of erythrocytes, [Ketchel & others] *404
COITUS
headaches during, cause, treatment, 2081
testicular pain during, 15 years after crushing injury, treatment, 1956
COLD: See also Freezing; Hypothermia, Artificial
agglutinins elevated in 7-year-old child with hemolytic and hypochromic anemia, (Diagnostic Problems) [Kushner & Szanto] *1013
conization, advantages of, new instrument, [Fleming] *886
icy nose in healthy woman going through menopause, cause, 2084
COLE, GEORGE EDWARD, wanted by F. B. I., (photo) 1384
COLIC
biliary, diazotization rate of blood bilirubin in diagnosis, [Schalm] 2061—ab
COLISEPSIS: See Escherichia
COLITIS
amebic, rectal biopsy in diagnosis of, [Juniper] 127—ab
ulcerative, [Hughes] 1701—ab
ulcerative, and biliary cirrhosis, treatment, 1297
ulcerative, and osteoporosis, unusual features, 1426
ulcerative, arthritis with, [Bywaters] 819—ab
ulcerative, triamcinolone for, United Kingdom, 1258
COLLAGEN DISEASE
relation to amyloidosis, [Teilum] 1813—ab
COLLEGE: See also University
campus, outbreak of infectious hepatitis on, [Clark] 132—ab
degrees, medical schools having entering classes consisting predominantly of students with, 1514
records of first-year medical students, 1512
COLON
cancer under age of 40 [Ezzo] 1405—ab
chest pain of colon origin, [Palmer] 1702—ab
diverticulosis, hiatus hernia, and cholelithiasis, association of, [Foster & Knutson] *257
megacolon and its treatment in children, [Doletski] 342—ab
megacolon, operative treatment, [Noordijk] 455—ab
surgery, transverse incision in abdominal surgery of, [Trimpi] 2307—ab
tumors, lipomas, [Henderson] 131—ab
tumors, polyposis, Brazil, 2168
tumors, polyps and malignancy, Brazil, 430
COLOR
coloring of semen, cause, 2207
evaluation of newborn infant, [Apgar & others] *1985
index, normal, United Kingdom, 2048
COLPOSCOPY
observations of ectocervix of pregnancy, [Lang] 457—ab
COLUMBIA UNIVERSITY
Institute of Nutrition Sciences, new advisory board of, N. Y., 2030
COMA: See Diabetes Mellitus; Liver
COMMISSION ON MEDICAL CARE PLANS: See American Medical Association
COMMISSUROTOMY: See Mitral Valve
COMMITTEE on gastrointestinal dietary therapy, annual report on, 1058
COMMUNICABLE DISEASES
in U. S., A. M. A. resolution on Korean children, 70; 2150
is paralysis agitans? 1594
COMMUNITY
Alabama medical rating survey, (Council survey) 1378
Health Council questionnaire for practicing physicians, [Babow & others] *268
rated in Alabama physician placement survey, [Medicine at Work] 777
rehabilitation services more practical than a center, [Medicine at Work] 1368
trials of BCG vaccination, [Palmer] 355—ab
COMPAZINE: See Prochlorperazine
COMPETETIVE ATHLETICS: See Athletics
COMPOCILLIN V: See Phenoxymethyl Penicillin
COMPOUNDS (listed by number)
E-39, [Brunschwig] 964—ab
BZ 55 (carbutamide): See Sulfonylureas
D-860 (tolbutamide): See Sulfonylureas
2043-U (tolbutamide): See Sulfonylureas
6782, France, 209
6987-U (carbutamide): See Sulfonylureas
11,925 C, Brazil, 1254
11,925 and 11,925C, India, 863; 1680
189c56, [Locket] 1582—ab
COMPRESSION
in arthrodesis, compare methods of fusion of knee, [Stewart] 328—ab
CONFERENCE: See also list of Societies and other Organizations at end of letter S
calls for medical society action in aging, [Medicine at Work] 769; 779—E
on aging, letter from Dr. Blasingame to U. S. Senate regarding, 695
Trans-Atlantic, annual report of Council on Scientific Assembly, 1073
CONFIDENTIAL Communications: See Privileged Communications
CONGRESS: See also list of Societies and Other Organizations at end of letter S
Japan Medical, Ralph Creer to organize and direct International Medical Film Exhibition, 695
CONIZATION: See Uterus cervix
CONJUNCTIVITIS
allergic, percentage of epinephrine absorbed systematically from eye? 1832
incidence following silver nitrate and oxytetracycline in newborn eyes, [Mathieu] 121—ab
CONLEY, YVONNE, wanted by F.B.I., (photo) 1384
CONN'S SYNDROME: See Aldosteronism
CONSANGUINITY
marriage and heredity in second generation, (replies) [Roderick; and original consultant] 363; 364
CONSENT, annual report of Law Department on, 1045
CONSTIPATION: See Cathartics
CONSTRUCTION projects, guide for medical services for, (Council guide) 1901
CONSULTATION
rehabilitation, recommend A. M. A. approve project and urge its implementation, action on, 56
with interested sections in special publications of A. M. A., resolution on, 71
CONTRACEPTION
cytometer chamber spermatocidal test, [Berberian & Slighter] *2257
Japan, 806
CONTRACTURE
Dupuytren's, special reference to pathology, [Larsen] 966—ab
CONVULSIONS: See also Eclampsia; Epilepsy
effect of prolonged administration of anticonvulsant drugs, India, 1798
signs and symptoms in chronic renal failure, [Effersøe] 214—ab
treatment, primidone; intoxication from, [Plaa & others] *1769
treatment, resection of temporal lobe, [French] 334—ab
COOLEY'S Anemia; Trait: See Leptocytosis
COPPER
biliary excretion before and after intravenous copper in chronic liver disease, [Bertolini] 840—ab
CORNEA
complications of chloroquine phosphate therapy, [Zeller & Deering] *2263
opacities, dissolving, in woman 79 with diabetes, 138; (reply) [Mann] 1838
CORONER SYSTEM
Medical Examiner System and, annual report, 1046
CORPORA CAVERNOSA
induration, treatment, 1955
CORTEF: CORTRIL: See Hydrocortisone
CORTICOSTEROID HORMONES
adrenal hypofunction after withdrawal, [Vermeulen] 1406—ab
effects on course of miliary tuberculosis, [Nitschke] 2193—ab
effects on hepatic glycogenesis, [Fodden] 969—ab
effects on radioactive iodine test, 1734
in pathogenesis of congestive decompensation, [di Perri] 975—ab
preoperative and postoperative therapy of hypophyseal adenomas and craniopharyngiomas, [Decourt] 454—ab
symposium-panel discussion on use and abuse of, program, (A. M. A. symposium) 41
toxicity, gastrointestinal, [McHardy] *1868
treatment of adrenal disorders, (Council report) [Thorn & others] *2130
treatment of spinal form of hereditary sclerosis? 1957
treatment of thrombopenic purpura after mumps, [Kolars & Spink] *2213
treatment of tuberculous meningitis, (India) 1392; [Dieckmann] 1580—ab
treatment (prolonged) and antibiotics, 134
treatment (prolonged intermittent) in nephrosis in children and adults, [Lange & others] *377
CORTICOTROPIN (ACTH)
action in asthma, 1836
effects in mumps meningoencephalitis, [Spitznagel] 827—ab
producing tumor of pituitary, [Nelson] 1158—ab
treatment (emergency) of corrosive esophagitis, France, 1255
treatment of adrenal disorders, (Council report) [Thorn & others] *2130
treatment of spinal form of hereditary sclerosis? 1957
treatment (prolonged intermittent) in nephrosis in children and adults, [Lange & others] *377
CORTISONE
as cover for major surgery in advanced pulmonary tuberculosis, [Edge] 2185—ab
Delta—: See Prednisone
effects in mumps meningoencephalitis, [Spitznagel] 827—ab
Hydro—: See Hydrocortisone
treatment (emergency) of corrosive esophagitis, France, 1255
treatment in staphylococcic pneumonia in infants and young children, [Bühler] 222—ab
treatment, massive doses in hepatic coma, [Pessar] 324—ab
treatment of malignant hemoblastoses, Austria, 1922
treatment of rheumatism, Sweden, 1394
treatment of sarcoidosis of spinal cord, [Moldover] 2182—ab
CORTOGEN; CORTONE: See Cortisone
CORYNEBACTERIUM
diphtheriae, toxigenicity of, India, 93
COSMETICS
A. M. A. Committee on, annual report, 1062
COTINAZIN: See Isoniazid
COUGH
solitary pleural effusion due to myxedema with, [Schneierson & Katz] *1003
syncopy, Denmark, 1924
COUMADIN: See Warfarin Sodium
COUNSELING
outpatient pastoral, in medical center, [Young & Patrick] *24
COXSACKIE VIRUS
B virus infection, virus in blood, urine, and cerebrospinal fluid, [Utz & Shelokov] *264
groups A and B, acute benign pericarditis with, [Movitt] 106—ab
infection, Canada, 1922
infection, serious, in infants and children: myocarditis, meningoencephalitis, and hepatitis, [Hosier] 1941—ab
pneumonia, possibility of infection by pigs, [Verlinde] 1825—ab
COYOTE, rabies in, Mich., 909
CRANIOPHARYNGIOMA
improve surgical treatment by preoperative and postoperative adrenocortical hormones, [Decourt] 454—ab
CRANIUM
internal carotid thrombosis simulating intracranial space-occupying lesion, [Clarke] 117—ab
intracranial arteriovenous aneurysms, effects on cardiovascular system, [Höök] 335—ab
intracranial calcification after tuberculous meningitis in children, [Lorber] 958—ab
intracranial venous thrombosis in puerperium, [dalle Ore] 956—ab
trauma, control extradural hemorrhage after, New Zealand, 95
CREEPING Eruption: See Larva Migrans
CREIGHTON UNIVERSITY SCHOOL OF MEDICINE
training in rehabilitation, 419
CRETINISM
early diagnostic criteria, [Lowrey] 1278—ab
CRIMINALS
Broadmoor asylum for criminally insane, facts about, United Kingdom, 98
Wanted by FBI: See Federal Bureau of Investigation
CROUP
in infant, isolate cytopathogenic agent resembling CA virus from, [Cramblett] 461—ab
CRYING
vagitus uterinus: cry in uterus, [Iklé] 459—ab
CRYPTOCOCCOSIS: See Torulosis
CRYPTORCHISM: See Testes, undescended
CUSHING'S SYNDROME
in child with adrenocortical carcinoma and excessive aldosterone production, [Jackson] 1701—ab
surgical treatment, [Glenn] 2184—ab; (management and metabolic aspects of adrenalectomy) [Mason] 2308—ab
treatment, current status, (Council report) [Thorn & others] *2130

CYANOCOBALAMIN (vitamin B_{12})
in blood: See Blood
radioactive, diagnostic value of, [Pitney] 442—ab
tobacco amblyopia and, United Kingdom, 435
treatment of pernicious anemia, administration and dosage, 1836
treatment of pernicious anemia, intrinsic-factor-inhibitor in serum after, [Schwartz] 943—ab
treatment plus intrinsic factor in Biermer's disease, [Croizat] 1586—ab
CYCLAMYCIN: See Triacetyloleandomycin
CYCLOPROPANE
anesthesia, manual and mechanical control of ventilation during, [Wester & others] *2249
CYCLOSERINE
treatment of tuberculosis, [Zorini] 834—ab
CYST
congenital cystic dilatation of common bile duct, [Ravitch] 2310—ab
cystic disease of breast, treatment results, [Hendrick] 2063—ab
of thymus, myasthenia gravis after removal; electrolytes during crisis, [Fongi] 456—ab
ovarian, progesterone for, 1294
pancreatic pseudocyst, clinical and surgical aspects, [Waugh] 451—ab
pilonidal, carcinomatous degeneration, [Matt] 2311—ab
postpneumonic pseudo air, in children, [Schlager] 1817—ab
CYSTADENOCARCINOMA
of ovary and uterine pregnancy, [Chávez] 2315—ab
CYSTIC FIBROSIS: See Pancreas
CYSTINOSIS
de Toni-Fanconi syndrome with, clinical and metabolic study of 2 cases in family, [Worthen] 121—ab
CYSTITIS: See Bladder inflamation
CYTELLIN: See Sitosterols
CYTOLOGY: See Cells
CYTOMEGALIC INCLUSION DISEASE: See Cells
CYTOMETER chamber spermatocidal test, [Berberian & Slighter] *2257

D

DBED: See Benzathine Penicillin G
DBI: See Phenylethyldiguanide
DACRON, elastic, prosthesis, clinical use, [Szilagyi] 2305—ab
DANDER
dog, and asthma, (replies) [Howard; and original consultant] 1170
DANISH Medical Association, how it serves members, 1923
DARAPRIM: See Pyrimethamine
DAUGHTER: See Families
DEAF-MUTISM
congenital, prolonged QT interval, syncopal attacks and sudden death, [Levine] 1818—ab
DEAFNESS
bilateral, in Cogan's syndrome with cardiovascular disease, [Eisenstein] 108—ab
bilateral nerve, after contrecoup brain damage; cause, treatment, 2081
etiology: earplugs? 1958
etiology: intramuscular neomycin, [Körtge-Stöppler] 1285—ab
information for parents of young deaf children, Chicago, 294
DEATH
after poliomyelitis inoculation, United Kingdom, 709
cause of, change of anesthetic, United Kingdom, 1927
cause of, penicillin toxicity, follow-up study, (reply) [Cooper] 319—C
cause of, pentolinium tartrate, United Kingdom, 926
cause of, tetanus, New Jersey, 75
cause of, what is? pathologist's death certificate, [Erhardt] *161; (reply) [Ziegler] 1260—C
causes of, Norway, 1571
certificates, physicians need not give, United Kingdom, 2045
forcible blood and fluid injection into arteries in terminal states, [Radushkevich] 1711—ab
of Physicians: See Physicians; list of Deaths at end of letter D
Rate: See Vital Statistics, mortality
sudden, "bangungut syndrome," in Filipinos, [Nolasco] 1403—ab
sudden, in congenital deaf-mutism with prolonged QT interval and syncopal attacks, [Levine] 1818—ab
sudden, in infancy, United Kingdom, 925
sudden, parathyroid crisis causes, [Hewson] 1157—ab
unexplained, aspiration of food and vomitus, United Kingdom, 1152
unexplained, from exchange transfusion, [Taylor] 340—ab
DECOMPRESSION
transantral, for malignant exophthalmos, [Walker] 951—ab
DECORTIN: See Prednisone
DEFICIENCY DISEASE
encephalopathies in alcoholism, [Lapresle] 827—ab
DEHYDROGENASE
succinic, in human spermatozoa, India, 94
DELINQUENCY
juvenile, United Kingdom, 1153
DELIRIUM TREMENS: See Alcoholism
DELTA-AMINOLEVULIC ACID: See delta-Aminolevulic Acid
DELTA CORTEF: See Prednisolone
DELTACORTISONE; DELTASONE; DELTRA: See Prednisone
DEMENTIA PRECOX: See Schizophrenic Reactions
DENTISTRY
use of hypnosis, (Council report) 186
DENTURES: See under Teeth
DEODORANTS
relation to supply of milk in breast feeding, 1297
DEPENDENTS' Medical Care Program: See Medicare
DEPRESSION: See Mental Depression
DERMATITIS
Atopic: See Neurodermatitis
Industrial: See Industrial Dermatoses
DERMATOSIS: See Skin disease
Industrial: See Industrial Dermatoses
DESENSITIZATION: See Allergy
DESOXYRIBONUCLEASE
chymotrypsin with, to reduce sputum viscosity, United Kingdom, 2173
DETERGENTS
contaminants in needles and syringes used for spinal anesthesia, effects of, [Joseph & Denson] *1330
subungual hemorrhage in pan washers from, [Long] *1226
DEXTRAN
sulfate, alopecia due to, United Kingdom, 167:1029, June 21, 1958; (correction) 168:81, Sept. 6, 1958
DEXTROSE: See Glucose
DIABETES MELLITUS
coma in infancy, United Kingdom, 311
complications: dissolving corneal opacities in woman 79 with, 138; (reply) [Mann] 1838
complications: impotence, [Rubin & Babbott] *498
complications: peripheral vascular, survey of 3,600 cases, [Kramer] 2181—ab
complications: xanthoma, treatment, 1423
Diabetes Week, Nov. 16-22, 297
early juvenile, "insulitis" in, [LeCompte] 2199—ab
genetic background, 137
incidence in asteroid hyalitis, [Smith] *891
insulin-producing capacity of pancreas of children with, [Klein] 1718—ab
neonatal tetany in newborn babies of diabetic mothers, [Craig] 1717—ab
nutritional management of children with, (Council report) [Jackson] *42
pheochromocytoma, and glycosuria, [Freedman] 1703—ab
pregnancy wastage and, A. M. A. Subcommittee annual report on, 1060
restrictions in licensing pilots with, 363
severe, hypophysectomy in, neurosurgical aspects, [Javid] 1814—ab
treatment, chlorpropamide, (United Kingdom) 1574; [Murray] 2074—ab
treatment, DBI, nonsulfonylurea, [Krall] 835—ab
treatment, hypoglycemic sulfonamides, France, 803
treatment: phenylethyldiguanide, United Kingdom) 316; [Hall] 1286—ab
treatment: sulfonylureas, (Finland) 308; [Hofstetter] 1722—ab; [Ikkala] 2196—ab; (retinal hemorrhage relation to) 2208
DIAGNOSIS
congestive heart failure in 46-year-old woman, (Diagnostic Problems) [Kushner & Szanto] *277
generalized abdominal pain and acute renal failure, (Diagnostic Problems) [Kushner & Szanto] *1778
hemolytic and hypochromic anemia and elevated cold agglutinins in child, (Diagnostic Problems) [Kushner & Szanto] *1013
hospital insurance and diagnostic services, Canada, 90
state-operated diagnostic center, Canada, 431
tissue, postmortem, transforaminal curet necropsy of brain, [MacHaffie] 1823—ab
DIALYSIS: See Hemodialysis; Kidneys, artificial
DIAMOX: See Acetazolamide
DIAMTHAZOLE DIHYDROCHLORIDE
prednisone with, for noninflammatory scalp ringworm, [Kanof] 2318—ab
DIAPER
relationship between acrodynia and mercury absorption, 138
DIAPHRAGM
endometriosis, chronic recurring spontaneous pneumothorax due to, [Maurer & others] *2013
hepatodiaphragmatic interposition of jejunum, ileum, cecum and ascending colon with intestinal obstruction, [Aiken] 340—ab
injury, spontaneous pneumothorax in, found in routine laparotomies, 2083
ruptured, problem of, [Bernatz & others] *877
DIARRHEA
in infant, neomycin-sulfadimidin for, India, 1256
in infants, epidemic, coliform organisms in, Canada, 1677
signs and symptoms in chronic renal failure, [Efferson] 214—ab
DIASTASE in Urine: See Urine
DIATHERMY
coagulation, angiomatosis retinae 11 years after, [Vail] 2322—ab
DIATHESIS
hemorrhagic, signs and symptoms in chronic renal failure, [Efferson] 214—ab
DIBENZYLINE: See Phenoxybenzamine
DIBUCAINE
as spinal anesthetic, pharmacology, [Featherstone] *1327
DICUMAROL: See Bishydroxycoumarin
DIET
American Dietetic Association and A. M. A. sponsor committee on gastrointestinal dietary therapy, 1058
blood lipids and, physician himself, [McArthur] *1746
effect of certain oils on bile-acid secretion and serum-cholesterol, [Lewis] 131—ab
fat and cholesterol in, hypercholesteremia induced by, in monkeys, [Cox] 968—ab
for children with diabetes, (Council report) [Jackson] *42
for myopia in children, [Gardiner] 346—ab
high-fat, for obesity, and fatty acids, United Kingdom, 2046
in treatment of bleeding duodenal ulcer, [Weiss] 216—ab
Infant's: See Infants, feeding
lecithin in, can one use too much? 1168
low-phenylalanine, for children with phenylketonuria, [Berry] 462—ab
low-phenylalanine, for psychometabolic changes in phenylketonuria, [Meyer] 219—ab
of occupational groups, United Kingdom, 318
phosphorus and aluminum hydroxide in, (reply) [Farrar] 1838
produce experimental congenital malformations by, (Council article) [Warkany] *2020
protein and carbohydrate in, effects on cholesterolemia and atherogenesis in cockerels on high-fat, high-cholesterol mash, [Stamler] 976—ab
protein, methionine and vitamins, effects on plasma lipids and atherogenesis in cholesterol-fed cockerels, [Stamler] 976—ab
role of sodium in essential hypertension, [Dahl] 323—ab
sodium-low, physiological adaptation and clinical usefulness, (Council report) [Danowski] *1886
sodium restriction booklets, annual report on, 1059
DIETHYLCARBAMAZINE
treatment of tropical eosinophilia, India, 1392
DIETHYLSTILBESTROL
treatment of prostate cancer cause night sweats and dizziness? 983
DIFFUSIN: See Hyaluronidase
DIGITALIS
digoxin, intramuscular, experience with, [Fletcher] 437—ab
effect of acute digitalization in rheumatic heart disease, [Werkö] 1575—ab
preparations, compare six, by parenteral route, [Aravanis] 347—ab
treatment of myocardial infarction? 1297
DIGOXIN: See Digitalis
DIHYDROSTREPTOMYCIN
treatment plus penicillin, Sweden, 807
1,4-DIMETHANESULFONOXYBUTANE: See Busulfan
DIMETHOXYBENZAL ISONICOTINYLHYDRAZONE
treatment of pulmonary tuberculosis, [Rubbo] 1286—ab
DINACRIN: See Isoniazid
2,2-DIPHENYL-3-METHYL-4-MORPHOLINOBUTYRYL-PYRROLIDINE
after stomach surgery, Sweden, 708
DIPHTHERIA
antiserum intravenously, importance of, [Tasman] 712—ab
Corynebacterium, toxigenicity of, India, 93
diphtheritic laryngeal obstruction, prednisone for, India, 707
DIRECTORS: See Executives

DIRECTORY
American Medical Directory, (1957-1958 circulation) 1083; (20th edition available) 1232; (revision of categories) 1901
DISABILITY
evaluation by Social Security Administration's Medical Advisory Committee, 2284
guides to evaluation of permanent impairment of visual system, 58; 414—E; (Committee report) *475
Industrial: See Industrial Accidents; Workmen's Compensation
insurance program of social security, A. M. A. resolution on, 67
service-connected, in V. A. hospitals, A. M. A. resolution on, 67
DISASTERS: See also Civil Defense
emergency planning, regional variation in, [Medicine at Work] 772
Flint tornado, management of mass casualties, [Lyttle] 1826—ab
hospital plans for, yardstick for testing, (Council article) [Lichter & Cousin] *1131
medical mobilization for, New York, 1383
medical preparedness, [Hays] *254
plan developed for metropolitan Kansas City, [Medicine at Work] 1897
DISEASE
chronic, central information and referral services, annual report, 1108
chronic, Greenland's invalids, Denmark, 920
chronic, Home for Incurables affiliates with U. of Chicago, 197
Chronic Illness Newsletter, annual report, 1103
chronic, physician relationships, [Underwood] *1000
chronic, 2 Minnesota societies aim at home care for, [Medicine at Work] 1894
Iatrogenic: See Physicians
Industrial: See Industrial Diseases
isolation stress in, [Ziskind] *1427
Nomenclature: See Terminology
reviews of drug therapy, annual report on, 1056
systemic, oral diagnosis, [Hopp] *748
DISINFECTION
of water, 166:427, January 25, 1958; (correction) 168:364, Sept. 20, 1958
DISIPAL: See Orphenadrine
DISTEMPER
measles relationship, [Adams] 354—ab
DISULFIRAM
toxic effects, [Rathod] 2068—ab
DITUBIN: See Isoniazid
DIURESIS
antidiuretic factor and ascites, India, 1150
DIURETICS: See also specific diuretics, as Chlorothiazide
mercurial therapy, nephrotic syndrome complicating, [Riddle] 126—ab
osmotic, for refractory edema, [Bernstein] 104—ab
DIURIL: See Chlorothiazide
DIVERTICULITIS; Diverticulosis: See Colon; Intestines
DIZZINESS: See Vertigo
DOCTORS: See Physicians
Draft Law: See Medical Preparedness
DOGS
dander and asthma, (replies) [Howard; and original consultant] 1170
DRAFT: See Medical Preparedness
DRAINAGE
after gastrectomy, 716
retrograde surgical, of pancreas for chronic relapsing pancreatitis, [Puestow] 217—ab
DRESSINGS
bandage scissors, new, [Burnham] *760
magnesium sulfate, rationale of use, (replies) [Tredici; and original consultant] 1298
DROWNING
length of time which victim may remain submerged with hope of recovery, 1424
treatment, France, 1255
DRUGS
accidental poisoning, control of, [Cann & others] *717
Addiction: See also Narcotics
addiction to anileridine, [Therien & others] *2098
addiction to meprobamate, [Haizlip] 337—ab; [Boyd & others] *1839
addiction to those freely obtainable, United Kingdom, 2173
advertising of over-the-counter medications, A. M. A.'s action on, 57
advertising of proprietaries, (A. M. A. resolution on) 68; (annual report) 1052
American Drug Manufacturers Association, liaison committee, annual report of A. M. A. Council on, 1073
A. M. A. Chemical Laboratory, annual report, 1063
A. M. A. Council on, annual report, 1056
Army Medical Service Formulary released, 301
contraindicated in glaucoma, 1838
dangerous, automatic stop order on, A. M. A. resolutions on, 65
evaluation of, annual report of Council, 1056
evaluation of, factors influencing, especially timing in hay fever, (reply) [Engelsher] 1685—C
F. D. A.: See Food and Drug Administration
in shock of myocardial infarction, (Council report) [Selzer & Rytand] *762
in vitro method to determine rate of release of delayed and sustained release medication, 1063
means for identifying tablets or capsules, 1063
misuse of, especially kanamycin, [Mann] 814—C
new and nonofficial, 181; 285; 1771
DRUGS—Continued
new and nonofficial, monographs of tests and assays published in *Drug Standards*, 41; 185; 1012
oral medication with preparations for prolonged action, (Council report) [Dragstedt] *1652
Prescriptions: See Prescriptions
resistance in Shigella, Israel, 95
therapy, reviews of, annual report on, 1056
DRUNKENNESS: See Alcoholism
DUCTUS ARTERIOSUS
as avenue of escape in persistence of fetal ductus function after birth, [Abrams] 1280—ab
patent, surgery for, follow 250 patients, [Helsingen] 2063—ab
DUKE UNIVERSITY
allergy training program expanded, 420
new biology building, N. C., 1383
new medical education program, 1461
DUMPING SYNDROME, 1229—E
DUODENUM
arteriomesenteric occlusion of, [Bitner] 129—ab
cancer, diagnosis, (exfoliative cytology, rapid method of duodenal intubation) [Raskin] 440—ab; (secretin test) [Wenger] 441—ab
Ulcer: See Peptic Ulcer
DUPUYTREN'S Contracture: See Contracture
DUST
respiratory allergy, clinical entity in pediatrics, [Mande] 1720—ab
DWARFISM
pituitary, diagnosis and treatment, [Martin] 957—ab
DYES
azure A resin in tubeless gastric analysis, [Rosenthal & Buscaglia] *409
gallbladder, coronary insufficiency after oral administration, [Littman] 352—ab
stamp monograms on linen with, operator has muscular aches, nervousness, and retrosternal discomfort: industrial disease aspect, 361
DYSENTERY
Shigella sonnei, epidemic in general hospital, [Ehrenkranz] 1726—ab
DYSMENORRHEA, 1660—E
DYSPHONIA: See Voice
DYSPLASIA
epiphysial, multiple, [Barrie] 1269—ab
DYSTONIA
of basal ganglions, chemopallidectomy for, [Paxton & Dow] *755
DYSTROPHY
muscular, etiologic relation to poliomyelitis and head injury, treatment, 1422
muscular, menopausal, [Kaeser] 1938—ab
muscular, research at U. of Colorado, 1239
reflex sympathetic, sympathetic blocks in orthopedic surgery for, [Brennan] *504

DEATHS

A

Abbissinio, Joseph J., 426
Abbott, Leigh Gates, 2285
Adams, Granville Quinn, 302
Adams, Jesse Lee Jr., 203
Adams, Warren Sanford, 2036
Adler, Ludwig, 426
Affhauser, Robert Maurice, 426
Agnew, Lloyd Campbell, 2036
Ahroon, Carl Richard Jr., 1250
Alderman, Mason Clarence, 1916
Alexander, Horace Knox, 203
Alexander, Monroe Layfelte, 302
Alexander, Robert Mackey, 426
Allen, Greer A., 302
Allen, Samuel Shelhorn, 1793
Allen, Stephen Alex, 704
Allen, William Thomas, 704
Allum, Arthur Wesley, 203
Alston, Lucius Charles, 1793
Alter, Samuel, 1672
Ammann, Francis Xavier Jr., 83
Andersen, Silas Carl, 1916
Anderson, James Harlan, 915
Anderson, John F., 1672
Anderson, Lester D., 1916
Andes, T. Eugene, 2162
Andress, David Gustavus, 2285
Anthony, Walter E., 915
Appleton, Thomas J. Jr., 302
Aronson, Joseph David, 2036
Asbury, Charles Lowery, 302
Aszuk, Joseph Charles, 2162
Auerbach, Julius, 1566
Ausban, Henley Brown, 1250

B

Babcock, Elmer E., 1916
Bachmann, George William, 2162
Backman, Peter Louis, 302
Bailey, Hugh Alvin, 2285
Baker, Roscoe Edward, 302
Baker, Waldo Zimmerly, 426
Baker, William Washington, 1916
Balch, Franklin Greene, 1916
Baldwin, Janet Sterling, 1566
Ballard, Robert Jackson, 2285
Banks, William Henry, 915
Barber, John Raymond, 2036
Barber, Robert Forrest, 1916
Barber, Thomas Maxfield, 915
Barker, Reuben Allen, 704
Barnes, Bruce Smith, 915
Barnes, Lewis Chesley, 2036
Barnes, Walter Steele, 302
Barnett, Jacob, 915
Barnett, John Lacy, 302
Barrett, Michael Francis, 915
Barrymore, Eugene, 915
Beckwith, Henry Witter, 915
Beede, Ralph Worthing, 915
Beisbarth, Albert, 2036
Bell, James Edgar, 915
Bell, Richard Parker Jr., 302
Bender, Alva Jacob, 1566
Bennett, Francis Wayland, 83
Bennett, Marion Horton, 1250
Benson, Harry William, 2285
Beringer, Lester Eastwood, 2036
Berman, Joseph, 2036
Bernard, Louis Emile, 2162
Bernard, Melamed Benjamin, 1793
Beyer, John Andrew II, 2162
Binter, Paul Albert, 915
Birenboim, Irvin Myron, 302
Bishop, Harry Arthur, 1916
Bishop, Vernon Leslie, 2036
Blackburn, Elisha, 2285
Blaine, Edward Smith, 2162
Blake, Wendell Phillips, 915
Blakley, Julius Warren, 1147
Bland, James Moncure, 1566
Blankenship, Marvin Winfred, 2285
Bliss, Howard Clifford, 426
Bliss, Rodney Waldo, 1387
Blodgett, George Francis, 83
Blood, Wilkie Hooper, 704
Boericke, Oscar Eugene, 2162
Bohannan, Hugh Russell, 2285
Boiarsky, Julius Lewis, 2285
Bolander, Lewis Paul, 302
Bonar, Everett Twinem, 2036
Bonnell, George Harrison, 1566
Booher, James Mathew, 1250
Boone, Henry H., 1672
Booth, Franklin H., 1916
Bosenbury, Charles Searles, 915
Bouslough, Elmer E., 2036
Bove, Anthony Daniel, 83
Bowen, Wilbur Lorenzo, 83
Bowman, James Luther, 1250
Boyd, Frank, 1916
Boyd, Lee Jackson, 302
Boyden, Guy Lee, 1387
Bradford, William Herbert, 916
Brager, Louis R., 426
Branch, Frederick Douglas, 203
Brennan, Alfred Theodore Vincent Jr., 426
Brenner, Edward Christopher, 203
Brockway, Porter Bruce, 2285
Brody, Arnold Warren, 916
Brown, Alfred, 2036
Brown, Andrew Dobbie, 426
Brown, Charles W., 1387
Brown, Joseph Nichols, 2162
Brown, Rolla Oscar, 426
Brown, William Lee Sr., 1566
Brumfiel, Daniel Milton, 916
Bruno, John Robert, 916
Buchanan, Rogers Ross, 1916
Buck, Samuel Bernice, 1387
Bullock, Norman Charles, 1566
Bunge, Charles Albert, 203
Bunker, Charles Waite Orville, 1672
Burch, Lewis J., 1147
Burch, Newnan Burgess, 2162
Burke, Joseph Peter, 2162
Burleson, William Brown, 2162
Burner, Allen Eugene, 203
Burner, Henry Clay, 1916
Burstein, Harry, 704
Burton, William Stone, 1566
Busman, George J., 916
Butler, Harry M., 2163
Butterfield, Clarence Egbert, 2285
Butz, Joseph Aaron, 203

C

Cahoon, Daniel H., 302
Calkins, Irving Romaro, 1250
Campbell, William, 2036
Carbonell, Arturo, 203
Cardinale, Pasquale F., 704
Carman, John Thomas, 2163
Carnathan, William George, 1387
Carruth, Roy Wathen, 83
Carter, Lew Arthur, 1672
Case, Frank William, 1250
Cates, Albert, 1387
Cattermole, George Stephenson, 1672
Cervone, Louisa Santoro, 426
Chalfant, Estalee Martha, 1250
Chandler, Ada B., 704
Chapman, Jeff Watson, 83
Chapman, William Herbert, 1916
Charles, Thomas Goodell, 2163
Chenoweth, Laurence Benjamin, 2163
Chisholm, William Payne, 83
Chobot, Robert, 1672
Christensen, Walter, 426
Cipriani, John Baptist, 2036
Clancy, Frank Jeffery, 916
Clarenbach, Julius F., 1147

Clark, Harold Chandler, 2285
Clarke, Anna Calista, 704
Claybon, Festus, 1147
Clifton, Willie Mae, 2286
Close, John Harry, 2163
Coburn, Henry Clay Jr., 2286
Cochran, Athol, 2286
Coffee, John Young Jr., 2163
Coffman, John Marvin, 1793
Coletta, John Joseph, 1673
Colleran, John Patrick, 1387
Collins, Joseph Kennard, 1673
Colmore, Rupert McPherson, 83
Combs, Victor Ray, 1673
Condon, John Joseph, 2037
Conner, Elwin Iris, 203
Conrad, Robert Waite, 426
Conway, John Michael, 1916
Conwell, John William, 1793
Cook, Byron Llewellyn, 1387
Cook, Elbert Clancy, 426
Cook, William Henry, 83
Cooley, Ben Hunter, 2286
Coover, Donald Bruce, 704
Corbin, Robert Adwood, 426
Cornell, Beaumont Sandfield, 1673
Corry, Lawrence Fitzgerald, 916
Corse, Charles A., 1147
Cosgrove, Edgar Francis, 1387
Cottrell, Asher Raymond, 83
Council, Melton Downie, 2163
Cousins, Sidney Charles, 2037
Cowles, Robert Sebastian, 1387
Cox, Charles Leon, 83
Crane, Benjamin Franklin A., 83
Creighton, Matthew Eugene, 2163
Criss, Ralph J., 1387
Critchfield, Otis D., 426
Cronin, Herbert Joseph, 2163
Crosby, Roy Campbell, 203
Crotty, Nora, 1566
Crump, John Howard, 1916
Cuff, John Reginald, 2286
Cuff, William Sherman, 1917
Cunningham, James Hay, 704
Curry, Dalferes Pennington, 427
Cutler, George David, 704

D

Dahlstrom, Arthur William, 1250
Daine, Donn David, 1147
Dakin, Robert Griffin, 83
Daley, Thomas Robert, 1250
Danell, Karl August, 704
Danforth, James Chester, 427
Daniel, Samuel Greene, 2163
Danskin, Melville, George 2163
Davidson, Walter E., 1566
Davis, James Ethelbert, 1387
Davis, James Matheson, 2163
Davis, William T., 1566
Day, Kenneth Knowlton, 1917
Deak, Alexander Paul, 1388
Decatur, Edwin Forrest, 1388
Deemar, Paul Roscoe, 1917
de Lappe, Guerne Wilson, 704
Delbaum, Harry, 2163
Dello Russo, Michael, 1147
Denman, Morris Aquila, 1673
Denniston, Frank, 704
De Pree, John Nelson Warren, 1388
de Steiguer, John Rodolph, 203
Devine, Winifred Morrill Woolls, 203
Dias, Joseph Lawrence, 1388
Dickinson, Almer Edwin, 427
Dillen, Oscar Marion, 1566
Dillon, Bert John, 83
Dillon, Carl Joseph, 704
Dimmitt, Egbert King, 203
Ding, George Harvey, 1917
Di Rienzo, George Michael, 2163
Dixon, Robert Emmett, 1388
Dodd, John Edward, 427
Dolan, Paul Egan, 704
Doll, Joseph Edwin, 1917
Donnelly, Edward John, 2037
Dorsey, George Hamilton, 203
Dougherty, Edward Francis, 2037
Downes, John Raymond, 1388
Doyle, Francis Joseph, 1388
Drake, Eugene Henry, 1917
Dreiss, Adolph Martin, 1793
Drescher, Edward Philip, 83
Drouin, Wilfred George, 1147
Dudley, Augustus William, 2163
Duffy, Joseph Benedict, 84
Duncan, B. W., 1917
Duncan, William Stevenson, 84
Dungay, Neil Stanley, 1673
Dunn, James, 2163
Durburg, John Russell, 1388
Durham, Silas Lucius, 916
Dusthimer, Oren Isaiah, 2164

E

Eagle, James Carr, 84
Ebeling, William Bruno, 2164
Edelen, James Joseph, 705
Edstrom, Henry, 203
Eilers, Paul Gerhard, 1673
Ekstrom, John E., 1250
Ekwurzel, George Macy, 204
Elder, Eugene E., 2037
Elkin, Daniel Collier, 2286
Emerson, Ralph Waldo, 84
Engelhardt, Carolina Sylvia Ruth, 1793
Englander, Charles, 84
English, Martin Joseph, 705
Eschelbacher, Leo Joachim, 84
Estabrook, Bert U., 1673
Eubanks, John Edward, 84
Evans, David Phillip, 84
Evans, William Powell, 705
Everist, Guy Vernon, 1388
Exter, Donald John, 1673
Eyestone, Fred Levi, 204

F

Falk, Alfred, 705
Faltin, Ladislaus, 916
Farrar, William Charles, 2164
Farrell, Charles Vincent, 916
Fawcett, Charles Emerson, 84
Fearrington, James Cornelius Pass, 916
Feasler, Charles Herbert, 84
Fellers, Ray Leopold, 1673
Feltenstein, David William, 916
Ferree, Arthur Cruzon, 1566
Ferrier, Paul Alexander, 303
Fessman, John William, 427
Fett, Bennie John, 427
Field, Thomas Sullivan, 2164
Fillmore, Hartson Dustin, 427
Finney, Horace Maynard, 1917
Finsterwald, Charles Frederick, 1566
Fisch, Benjamin, 427
Fischer, Morris, 84
Fischer, Oscar Gustav, 705
Fitzporter, Alonzo Leo, 2164
Flesher, George Taylor, 1147
Fliedner, Giordano Bruno, 705
Flower, Morris Aaron, 427
Flynn, Edward Anthony, 1673
Foot, Nathan Chandler, 1388
Forkin, William Patrick, 427
Forrer, Daniel Atwell, 799
Fort, Chester Arthur Jr., 1567
Fortelka, Frank Louis, 799
Foster, Wilmot Coyne, 84
Fracasse, John, 799
Freeman, Rowland Godfrey Jr., 1388
French, Oscar William, 916
French, William Joseph, 705
Frey, Jesse Jacob, 85
Frey, Robert David, 2164
Friedman, Joseph, 2164
Frisch, Felix, 85
Frymire, Ewett Waverly, 2164
Fulton, James Fairfax, 1567
Furey, Warren William, 1793

G

Gaberman, Peter, 1250
Gallagher, James Francis, 2164
Gallivan, Thomas Humphrey, 2164
Galloway, Philip Lee, 1567
Gancher, Jacob Isaac, 1673
Ganey, Joseph Matthew Sr., 1794
Gardner, Charlotte Bell, 705
Gault, Edwin Sartain, 1250
Gazzolo, Louis Joseph, 1567
Gellert, Edmund, 303
Gerwig, Henry Eugene, 1794
Gibbens, Howard Clinton, 427
Gibbons, Charles Kimball, 2164
Gibson, Stewart Merrill, 204
Gilbert, Edwin Carpenter, 1389
Gilbert, William Paul, 1567
Gilmer, Roy Jones, 1389
Girvin, Richard Bates, 1389
Glassberg, Irving Jeffery, 427
Glazer, Alfred Mirron, 1794
Gleason, Ralph Sidney, 2164
Glogowska, Jadwiga, 1917
Godschall, Alice Bush, 799
Goff, William Hunter, 1251
Goggins, John William, 1794
Goldenberg, Marcellus, 204
Goodman, Samuel, 85
Gordon, Charles Howard, 204
Gordon, Edward Johnston, 427
Goudelock, John Jefferies, 2164
Graham, Joseph Brown, 799
Graham, William Alex, 427
Grant, Hugh D., 1917
Grant, John Joseph, 1251
Grant, William Lee, 2164
Graves, John William, 1567
Gray, George Morris, 916
Gray, George Morris, 799
Gray, Robert, 1251
Gray, Robert Hollingsworth, 2164
Green, David Samuel, 1147
Greene, George A., 1251
Greenwald, Jesse, 705
Gregg, Ulysses Sherman, 1389
Gridley, Norman Grandison, 1147
Griffith, Eugene Frederick, 1147
Grove, Thomas Leon, 85
Grube, Orin Charles, 2287
Guion, Clarence Child, 1917
Gunn, William Ussery, 1567

H

Hackler, John Fielden, 1567
Haggart, Harry Humphrey, 85
Haines, Charles Tomlinson, 204
Haines, Haroid Grunder, 1567
Haines, Willits Parker, 1673
Haiabi, Nour Eddine, 427
Haley, Marcus Delafayette, 427
Hall, Huger Tudor, 427
Hall, James Frank, 1673
Hamilton, Charles H., 1917
Hanson, Charles Joseph, 1567
Hardenbergh, Leroy Thorne, 705
Hardesty, Henry O., 1251
Hardie, Julian Carter, 1389
Hargrove, Henry C., 2164
Harper, George Tinsley, 1917
Harper, Stephen F., 1673
Harris, Stephen Howat, 303
Haynsworth, Custis Hall, 1389
Hayward, Eugene Henderson, 427
Heath, Louanna, 428
Heibing, Harry Hugh, 85
Heiland, John William, 1389
Helmholz, Henry Frederic, 799
Henry, Clyde A., 1147
Henry, John Philips, 85
Henry, John Robert, 2164
Herbert, William, 2165
Herbst, Richard Fred, 2287
Herrington, Lee Richard Sr., 85
Herzon, Herbert, 204
Heston, Herman E., 1794
Heyroth, Francis Farnham, 1251
Hicklin, Frank E., 1147
Hicks, Harvard Raymond, 428
Higley, Charles James, 1794
Hileman, Stephen Lee, 1704
Hill, Ralph Lee, 1251
Hillenbrand, Alfred Edwin, 1794
Hilliard, Charles Wesley, 1794
Hillyer, Ernest Elwood, 85
Hindman, Sims Seward, 2287
Hitchins, Clayton Stanley, 2037
Hitt, Ashby J., 85
Hobbs, Louis Lyndon, 1917
Hochwald, Adolf, 1389
Hockenbery, Merritt L., 1147
Hoermann, Rudolph Bernhard, 800
Hogshead, J. McChesney, 85
Holland, Harry Albert, 800
Holland, Robert E. Lee, 1673
Hollingsworth, Samuel Glen, 85
Holton, Thomas Jefferson, 428
Hood, Arthur James, 1674
Hopkins, John Rolph, 85
Horton, Ray Beaman, 204
House, Lewis Clinton, 428
House, Harry George, 1147
Howard, Robert Warner, 1147
Howell, Asa, 1251
Hudson, Wendell Phillips, 1794
Humphrey, Wade Randall, 1147
Hurd, Annah, 1251
Hurd, Laura B., 1251
Hurrell, M. Louise, 1148
Hyder, Herman Pettibone, 428
Hydrick, John Lee, 1251

I

Iliff, Frances Jessie, 2037
Ingarra, Thomas Salvatore, 1251
Irvin, James, 800
Irwin, Henderson, 204
Isenberg, Bertice Alvin, 1917

J

Jackson, Albert F., 1674
Jackson, Chevalier, 303
Jackson, Isaiah Allen, 2287
Jackson, Richard Howard, 1794
Jacobson, Arthur Clarence, 2287
Jarrell, Columbus Marion, 1148
Jennings, Edward Allen, 1567
Jewel, Robert Theodore, 1674
Jewett, Earl Dayton, 1917
Joelson, Morris Samuel, 800
Johnson, Charles Isaac, 1794
Johnson, Frank, 2037
Johnson, Jesse Brealand, 1389
Johnson, John Franklin, 1389
Johnston, Cecil Fredrick, 204
Johnston, Edward Estill, 917
Jonas, Leon, 1794
Jones, Donald Jack, 800
Jones, Garnett, 85
Jones, Lemuel Winfield, 1674
Joseph, Cheney Cleveland, 2287
Joseph, Major Henry, 304
Joyce, Francis William, 1389
Joyce, Reid Petree, 428
Joyce, William Michael, 85
Judd, Clarence Wrigley, 1148
Juster, Vincent de Paul, 304

K

Kahlke, Charles Edwin, 1917
Kaplan, Isador, 1389
Kapian, Murray M., 1567
Karen, Benjamin, 85
Kass, Albert Joseph, 1918
Katz, Maxwell Clarence, 917
Kauffman, Kalman L., 1251
Kavaler, Samuel, 1251
Kavle, Carleton Porter, 1251
Keating, Robert Alfred, 2287
Keating, William Bernard, 1794
Keating, William Patrick Stuart, 304
Kechele, Delbert Vine, 1794
Keiller, Violet Hannah, 1918
Kelley, Catherine Rose, 85
Kelly, William Francis, 1148
Kelso, John Calvin, 1918
Kendrick, Charles Mattox, 204
Kennedy, J. Edward T., 2287
Ketchersid, John Wesley, 2037
Key, William Frank, 1251
Kiebala, Joseph Kasmer, 1567
Killoran, Vincent Ambrose, 428
Kirk, Albert Wellington, 85
Kitlowski, Henry, 1918
Klein, Sidney, 1389
Kleiner, Blanche F., 1674
Kleinman, Samuel Bernard, 304
Kline, Ralph Glenn, 428
Klotz, Fred Guth, 2037
Knight, Durell Keeling, 800
Knope, J. Colman, 1918
Kochmann, Alfred, 1795
Konzelmann, John Bruce Hill, 304
Kun, Bertram Bela, 917
Kusnitz, Morris Jr., 1674
Kvitek, Louis Charles, 2037
Kyle, Bernard Hewitt, 1390

L

Labensky, Alfred, 85
Lacy, Justin Ernest, 1390
Lange, Horst, 86
Lassen, Fritz, 86
Lazarus, Joseph, 304
Lease, Raymond Essex, 1918
Lebilcq, Fernand Joseph, 304
Lederman, Edward Isadore, 86
Leedy, Gladys June, 86
Le Goivan, Celestin, 1148
Leigh, Horace, 86
Leinoff, Harry David, 86
Leiter, H. Evans, 1795
Leith, Leroy Rhodes, 86
Lemere, Henry Bassett, 1918
Levant, Benjamin, 204
Levin, Charles Alec, 1795
Levy, Harry Robert, 1148
Lewis, Robert, 1148
Lilly, Edward, 1148
Lineberry, E. Dice, 1795
Lipschutz, Sigmund W., 2037
Lockwood, Howard De Forest, 1795
Loder, Horace Boltin, 1795
Loeb, Herbert, 1674
Logan, George W., 204
Lombardo, Bartio William, 204
Long, Samuel Clark, 428
Long, William Hunt, 1795
Loper, John C., 1795
Lo Popolo, Vincent Charles, 800
Ludwig, David Boyd, 304
Luhr, Alfred Francis, 800
Lund, Henry Joseph, 86
Lusher, Homer Virgil, 1567
Lusk, Hamilton Neal, 428
Lyle, James McCampbell, 204
Lytle, Ralph McKay, 1918

M

McAuliffe, William Joseph Jr., 1148
MacBride-Dexter, Edith, 2165
MacBride-Dexter, Martha Edith (See MacBride-Dexter, Edith)
MacBride, Martha Edith (See MacBride-Dexter, Edith)
McCandless, Orville Calnon, 1567
Maccani, William Louis, 1795
McCarthy, Daniel Joseph, 2037
McCartney, James Shearer, 1390
McClellan, George Sterling, 86
McClure, Charles Richard, 1568
McCord, Arthur Nelson, 428
McCoy, Earl Marcus, 1148
McCue, Francis Joseph, 86
McDonald, John Thomas, 1252

McGarry, Thomas Francis, 1252
McGhee, Saylor John, 917
MacGregor, Archibald E., 1795
McHugh, William James Jr., 1795
McKay, William H., 1918
McKenna, Henry Joseph, 2165
Mackey, Robert Bliss, 1252
MacKillop, Daniel 1918
McLean, Hugh Clayton, 1252
McLeod, Alexander, 1390
McMahon, Ralph James, 1674
McMeans, Joseph William, 1568
McMillan, John Ezra, 1148
McMillan, Walter Ree, 800
MacNamee, William Hiram, 304
McNealy, Raymond William, 205
McRae, Donald Hugh, 1795
McTague, William Francis, 86
Mahon, George Dixon, 800
Maier, Henry Whitefield, 304
Maldonado, Miguel Angel, 1795
Maley, Thomas Francis, 1568
Maloney, Thomas William, 86
Mammen, Goeke Henry, 1390
Manglesdorf, William F., 205
Mann, Joseph Lee, 86
Mantell, Sol R., 304
Manwaring, Ier Jay, 2287
Marasin, Theodore Louis, 1795
Marble, Ira Albertus, 205
Maroney, Frederick William, 1918
Marsh, Charles Lafayette, 1252
Martin, Albert J., 86
Martin, Charles Dyer, 2287
Martin, James Jackson, 1568
Martin, Thomas Morris, 304
Mason, Virgil Andrew, 1390
Mateer, Harry Oliver, 2165
Mathes, Sydney Bernard, 304
Mathis, William Harris, 428
May, James Robert, 305
Mayer, Willard D., 917
Mayfield, George Franklin, 800
Mayfield, Hugh F., 800
Mechling, George Seanor, 1390
Meddis, Victor Newcomb, 1674
Meehan, Patrick Joseph, 917
Meek, Charles Roscoe, 800
Meeker, D. Olan, 1795
Mellin, L. Robert, 428
Mendelsohn, Sidney Norman, 2165
Menger, Louis Charles, 917
Mentzer, John F., 1252
Meriwether, Ellyson Gwynne, 2165
Merrill, Ralph Edward, 1390
Merritt, Francis Elmer, 205
Mertz, Albert Adolph, 917
Metheny, Samuel, 2165
Meyer, Joseph Theodore, 205
Michaelis, Lucia, 1252
Miller, Luther Edwin, 1919
Milloy, Frank Joseph, 801
Mills, Harry Lee, 1796
Milos, James Leopold, 86
Minchew, Benjamin Harvey, 1796
Minkoff, Max, 1796
Mintz, Maurice Emanuel, 1568
Mockett, Percy Charles, 917
Moffitt, John Alfred, 1796
Monk, Louis, 1252
Montgomery, Claude William, 205
Moore, Benjamin B., 205
Moore, Dan Miller, 305
Moore, M. Elizabeth, 428
Moore, William Bain, 1796
Moran, William Grayson, 1148
Morris, Benjamin Franklin, 1252
Morris, Charles David, 305
Morris, Elliston Joseph, 1252
Morris, Hurston H., 1390
Morris, James Benjamin, 428
Morris, J. F., 428
Morse, George, 1919
Morsman, Charles Frank, 1796
Moser, William Calvert, 1148
Moulton, John Henry, 1148
Muhly, Edward George, 2038
Mulford, Henry Jones, 305
Mull, Joseph Harry, 1919
Muller, Lula Johnson Power, 1252
Munch, Clarence J., 428
Munch, Louise Lucy, 1390
Mundhenk, Herbert Conner, 917
Munoz, Roque Narciso Alfonso, 1390
Munson, Alban Elliott, 1674
Murdoch, James Wilson, 1568
Murphy, Dennis John, 205
Murphy, Leonard J., 1252
Murphy, Simon William, 1390
Murray, John Watts, 1148
Myer, Edward Herman, 1390
Myers, Roy Everett, 1568

N

Neilson, Charles Hugh, 917
Nelson, Cedric Henry, 1252
Nevitt, Orme Richardson, 1568
New, James Legrand, 1148
Newman, Frederick Jacob, 205
Newmann, Theodore William, 305
Nichols, Dan O., 305
Nickel, Allen Arthur Clarence, 428
Nielsen, Edwin Bjorne, 86
Nienstedt, Elam J., 305
Nimer, Melvin Arthur, 1148
Nixon, Edwin Allen, 1674
Noble, Guy Eugene, 801
Noon, Russell Alleyne, 801
Norris, Julia Anna, 1919
Novak, Eduard, 1919
Novello, Joseph Albert, 801
Noyes, Harriett Louella, 1252
Noyes, John Russell, 2165
Nussbaum, Oscar, 2165

O

Oakes, Frederick, 205
O'Brien, Daniel Patrick, 1148
O'Connor, Clarence Joseph, 1674
O'Connor, Ralph Edward, 428
O'Dell, Harry Clay, 305
O'Keefe, Edward F., 429
Olkon, David Mortimer, 1674
Olms, Frank Albert, 1568
Onesti, Silvio Joseph, 2038
Oppenheimer, Sali, 305
Osorio, Vasco Eric Monteiro, 1390
Owens, Frank Joseph, 1674

P

Pace, William Thomas, 205
Packard, Frederic Henry, 305
Pagett, Frank Elmer, 205
Painter, Thomas Edgar, 1919
Palen, Gilbert Joseph, 1796
Palmer, Clayton Hall, 305
Parker, Charles Edward, 1919
Parker, Rupert Merrill, 1252
Pater, Joseph Louis Anthony, 1919
Patterson, Charles Luther, 1919
Peirce, Bradford Hendrick, 206
Pellegrini, Pietro, 1390
Pence, James William, 1568
Pennell, Franklin Howard, 1252
Pennell, Melvin Thomas, 86
Pentel, Louis Simon, 87
Percy, Nelson Mortimer, 1674
Perelman, Julius Samuel, 87
Perkins, Orman Clarence, 917
Perkins, Roscoe Livingstone, 87
Petersen, Arthur Berg, 1919
Phillips, Edward Milliken, 1919
Phillips, John William, 1675
Phillipsen, John Albert, 1675
Phipps, George Wilson, 801
Pitkin, Horace Collins, 305
Pittenger, Earle Alexander, 1919
Platt, Marden Henry, 2038
Plummer, John Owen, 206
Poindexter, Frank Wilmore, 87
Pomainville, Frank Xavier, 1796
Pomper, Irving, 305
Poppen, Joseph A., 1252
Potter, Henry Bertram, 1919
Potter, Marjory Janette Macpherson, 1390
Potts, Frank Tuthill, 429
Power, Lula Johnson
(See Muller, Lula Johnson Power)
Powers, Earl Jennings, 1919
Pratt, Frederick Haven, 206
Pratt, Roscoe Wellington, 87
Predmore, Donald Ford, 1568
Prevor, Morris Aaron, 1568
Purviance, Walter, 429

Q

Qualfe, Lawrence Albert, 1675
Quattlebaum, Theodore Adolphus, 1568
Quigley, James Earle, 206
Quimby, Adoniram Judson, 1149

R

Rahming, Harry Ellsworth II, 1919
Rambo, William Harold, 305
Rankin, Pressly Robinson, 206
Ransbottom, Ivah James, 87
Rauch, Harvey Milton, 2165
Ray, John B., 1149
Reed, Elizabeth Bass, 305
Reed, Russel Soule, 2165
Reed, Theodore Byington, 87
Reed, Wendell Phillips, 1252
Reese, John Davies, 1919
Reeves, Alfred Edwin, 1675
Reeves, Emory West, 1253
Rehbock, Donald Jacob, 1149
Reinders, Otto W., 87
Reitz, Charles, 1568
Rhodes, Goodrich Barbour, 2038
Richardson, Lawrence Lafayette, 1149
Riley, James Horatio, 1568
Rinker, George Earnest, 1675
Rittenhouse, Jacob S., 1675
Rivers, Thurston Donnell, 206
Rockwell, John Arnold, 918
Rodenheiser, Edwin William, 1675
Rogers, Asa Holt, 429
Rohr, Joseph, 1253
Ross, Lucretius Henry, 2038
Ross, Rex Roy, 1675
Rozentals, Peteris Voldemars, 87
Rubin, Isidor Clinton, 87
Rubin, Lionel Charles, 705
Rumore, Samuel Charles, 1920
Runge, Otto Ernst, 1253
Russell, Chester, 305
Russell, Claude Vernard, 2038
Rutledge, Ralph Leyda Sr., 429

S

Saferstein, T. Harry, 429
Sako, Wallace Saburo, 206
Sanders, Leighton Albert, 2038
Sanders, Lewis Jackson, 2038
Sanders, Matthew J., 1920
Sands, Irving Jesse, 2287
Sappington, William Fulford, 1253
Sartor, Pierre, 918
Saulpaugh, Lincoln Moses, 1149
Sawyer, John Brewster, 801
Sawyer, Matthias Harvey, 2288
Schabinger, Charles, 1253
Schaller, George Jacob, 2038
Schlesinger, Louis Hertz, 305
Schmitt, Alexander Hunter, 2038
Schnaer, Carl Henry, 1569
Schwartz, William H., 1253
Schwarz, Francis Stenard Jr., 1569
Scott, Edwin Laurence, 2288
Scott, William Wylie, 1675
Scully, Robert Emmet, 1149
Sears, Henry Clark, 801
Seebert, Joseph Eldred, 2038
Seldon, Frank Gustav, 206
Seligman, Hans, 1675
Sell, Frederick William, 206
Sellards, Joseph Walter, 801
Seth, Raymond Ephraim, 1253
Sewell, Harry Dickey, 1569
Shahan, William Ewing, 918
Shanahan, William Henry, 206
Shane, Robert Shoemaker, 429
Shanley, Emmet Baxter, 429
Shannon, Charles Edward, 206
Shapiro, David, 1796
Shaul, Elmer Bryant, 206
Shaw, Henry Alden, 2288
Sheddan, William Joplin, 429
Sheets, Cecil Clarence, 87
Shemeley, William G. Jr., 1675
Shepard, Charles Angell, 1920
Sherer, William Walter, 1569
Shields, Robert Mansen Jr., 429
Shimer, Harry A., 918
Shirk, Paul Kuhlmann, 1569
Shoemaker, J. Donald, 1920
Shumway, John Raymond, 2288
Sicotte, Isaiah, 206
Siegel, Morton Theiman, 1920
Siegfried, Joseph Howard, 1149
Silverman, Eli, 1920
Silvert, Michael, 305
Simmons, Harold Leonard Jr., 1675
Simmons, William Arthur, 1149
Slack, Louise Wetherill, 1675
Slate, John William, 1675
Slayton, Frederic Hosea, 1253
Smith, De Witt Talmage, 2038
Smith, J. Harvey, 1920
Smith, John William Rosser, 206
Smith, L. C., 2038
Smith, Stephen Decatur, 305
Smith, Wilbur Forrest, 1920
Smith, William L., 1920
Snow, Bruce, 87
Sochacki, Alexander S., 429
Sonnenfeldt, Gertrud, 306
Soucek, Adolph, 1569
Southard, Jefferson Sherlock, 2288
Southard, Mabel Austin, 1253
Southworth, Franklin Chester Jr., 1920
Spain, A. L., 1569
Sparks, Francis Rufus, 2038
Sparks, Samuel M., 801
Speight, James Ambler, 2288
Spence, James Earle Hassard, 2038
Spencer, Harry Dee, 1920
Spratt, John Thomas, 1569
Sproc, Charles, 306
Sprunk, John Paul, 1920
Stacey, Winthrop Downing, 2038
Stack, Robert Anthony Henry, 801
Stahl, Clare William, 1569
Standard, Alphonso Perry, 1796
Stanley, J. Zeph, 1920
Stansbury, Frank R., 206
Stapleton, Harvey Burr, 2288
Staniunas, Juozas Joseph, 2038
Stayton, Chester A. Sr., 2038
Stern, Adolph, 1149
Stevenson, Arthur P., 2039
Steves, Bert Jerome, 1676
Stomberg, Carl Winfred, 801
Stout, Henry Isaiah, 1253
Straith, Claire LeRoy, 206
Straub, Hiram Grant, 207
Strickland, Harold, 2039
Strickland, John Thomas, 207
Strode, George King, 2288
Strother, Edwin Bower, 1920
Stuck, Robert Gustavus, 2039
Sturkey, Edgar Lafayette, 2289
Sturkie, Daniel R., 306
Styles, George Wilson, 1569
Sullivan, Thomas Henry, 2289
Sunderland, Paul Ulysses, 2289
Sutton, Lyle Adin, 1676
Swank, L. Forrest, 306
Swanson, Ernest Bruce, 207
Swanson, Harry Theodore, 2039
Swartsel, Samuel Carey, 2289
Swenson, Andrew Clay, 207
Swern, Nathan, 306
Swift, Earle Reed, 801

T

Tait, Edwin Forbes, 1920
Takacs, Henry, 1921
Takos, Michael James, 1676
Talbot, Clarence Weill, 207
Talbott, Edward Melville, 918
Tannhauser, Siegfried, 918
Taylor, Frank Bashford, 2039
Taylor, Richard Francis, 2289
Tenney, William Northend, 2039
Terflinger, Fred Weston, 1569
Terry, Ernest Alden Jr., 2289
Terry, Philip Roy, 2039
Tetrault, Phillas Eugene, 1676
Thomas, Francis Xavier, 1921
Thomas, Henry S., 2039
Thomas, Napoleon Roscoe, 2289
Thomason, Charles Franklin, 1676
Thomasson, William Edward, 429
Thomison, Samuel James Jr., 207
Thompson, Cleveland, 801
Thompson, John Maurice, 2039
Thompson, Joseph, 1253
Thompson, Joseph Ignatius A., 2289
Thorndike, W. T. Sherman, 2165
Tietze, Herman Christian, 1253
Tillman, Isidor R., 2166
Tracy, George Thomas, 2039
Trankle, Herbert Milo, 2039
Traywick, Asa Paul, 429
Treible, William Henry, 1569
Trice, Leroy, 207
Tronnes, Nils Laurantz, 306
Truex, Barbara Mae Binkley, 2166
Truslow, Walter, 1149
Tucker, Adam Reynold, 2289
Tucker, Augustine Washington, 2289
Tucker, Winston Harris, 306
Turner, Andrew Jackson, 1253
Turner, John Patrick, 1796

U

Underwood, Robert Alfred, 1253

V

Van Del, Dwight Tedcastle, 1149
Vandermar, Walter Elbert, 918
Van Iderstine, Reginald, 429
Vaughan, Merritt Carlton, 1253
Vaux, Norris Wistar, 918
Vehrs, George Rudolph, 918
Vining, Harriet Augusta, 1921
Virden, Charles Edgar, 2166
Vogel, Hymen Allen, 207
Voskuil, Anthony, 1921

W

Waddington, Algernon Henry, 429
Walker, Joseph Edison, 801
Walliker, Wilbur Myron, 429
Ward, John Hardin, 1149
Ware, Dudley B., 306
Warren, Alexander M., 2289
Warren, Robert Franklin, 1676
Watkins, Leo Harlan, 2289
Watts, Charles Edward, 2289
Webber, Henry Allen, 1149
Weber, Harry Matthew, 1921
Weinberger, William, 918
Weinstein, David, 87
Weinstein, Max Irving, 1253
Weitz, Franklin Mathias, 918
Welsh, Arthur Brinkley, 1569
Westrope, Gordon Robert, 1569

Whedon, Edwin Earl, 1676
Wheeler, David Riddell, 207
Wheelihan, Robert York, 207
White, John Edward, 1676
White, William Henry, 207
Whitehead, Seba L., 207
Whitely, Seals Leftwich, 2166
Wiatt, William Slaughter, 2289
Wiesenfeld, Paul Cholmar, 801
Wilcox, Ernest Hatch, 918
Wilkinson, Ernest A., 207
Williams, Charles Leroy, 1676
Williams, Edwin Lacy, 1569
Williams, Frank Spalding, 429
Williams, Hiram, 1676
Williams, Napoleon Kassire, 207
Williams, Paul Sinclair, 1569
Williams, Stuart Dudley, 1676
Williamson, Gladys Richarda, 1921
Williston, Thomas Augustus, 306
Willmarth, Edwin Hamilton, 2166
Willoughby, Gordon Leslie, 1921
Willson, William Herbert, 1676
Wilson, Claude, 1569
Wilson, Eva McClenahan, 2166
Wilson, George Hancock, 1921
Wilson, Marion Childress, 1921
Winchell, George D., 1676
Witherington, Albert Sidney, 429
Witherspoon, Waldorf Henderson, 306
Wittenberg, Carlton Emil, 918
Witter, Calvin Bassler, 918
Wood, William Ellege, 1253
Woodall, John L., 87
Wooden, James Leonidas, 2166
Woodman, James Brown, 87
Woolridge, John Hayes, 207
Worthing, Harry Jennings, 306
Wright, Frank Taylor, 306
Wright, John Francis, 918
Wyche, George Griffin Jr., 1921
Wyman, Harry Hastings, 429

Y

Yadkowsky, Emanuel, 1253
Young, Clifford William, 306
Young, Harry Hopple, 1253
Young, Roy Lowry, 1921
Yu, Poe-Eng, 306

Z

Zachariah, Simon R., 1569
Zanger, Carl Emil, 207
Zavisca, Joseph Albert, 1149
Ziegler, William Henry, 801
Zimmerman, Frank Dieffenbach, 2166

E

ECHO VIRUSES
type 9, epidemic virus meningitis due to, [Davies] 1290—ab
type 9, isolation from outbreak of aseptic meningitis with rubelliform rash, [Sultanian] 132—ab
EDTA: See Edathamil
EAR
eczema and pregnancy, hormones influence? 227
plugs, deafness from use of? 1958
ECLAMPSIA
pre-eclampsia, chlorothiazide effects on water and electrolyte excretion in, [de Alvarez & O'Lane] *2226
pre-eclampsia, incidence, [MacGillivray] 2069—ab
treatment: 21-hydroxypregnanedione sodium succinate, [Martini] 2069—ab
ECONOMICS
biological false-positive serologic tests for syphilis in low socioeconomic group, [Waring & others] *2004
Nuffield Foundation bounty, United Kingdom, 2295
pediatrics in transition due to, [Wheatley] *856
ECONOMICS, MEDICAL: See also Business Practice; National Health Service
aid for physicians in South Carolina, [Smith] 1684—C
A. M. A. action on VENDOR system of payments to physicians from public funds, 58; 1106
A. M. A. Bureau annual report, 1080
A. M. A. House decisions on fund solicitations, 2149
American Medical Education Foundation activities, 1473; (let us put it "over the top") 2147—E; (checks received) 2150
Carroll studies on costs of medical education, 1472
case of druggist and disappearing rental, [Medicine at Work] 1896
coffins, costs, and care, [Medicine at Work] 1891
compensation for military physicians, annual report on, 1068
compensations to physician in occupational medicine, [Belknap] *1847
cost of iron preparations, United Kingdom, 1574
cost of "medical" care, annual report, 1107
estimate costs for military care, 1662
estimate median student expenses per year, 1517
federal spending for 1959, 1452
general practitioners' pay dispute, fail to present to Court of Session, United Kingdom, 2172
meeting in Buffalo, N. Y., 1141
missiles or pensions, comments on V. A. program, (Miscellany) [Orr] *1686
National Fund for Medical Education activities, 1476
physician's share of public costs for indigent care, [Medicine at Work] 770
public relations and, Canada, 90
school expenditures, 1493; 1494
ECZEMA
ear, and pregnancy, hormones influences? 227
nummular, treatment, 1296
vaccinatum, [Reynolds] 1716—ab
EDATHAMIL
calcium-disodium for lead poisoning, [Cann & others] *717
calcium-disodium to dissolve corneal opacities in 79-year-old diabetic, 138; (disodium, not calcium-disodium) [Mann] 1838
EDEMA
anasarca, polyserositis and, anomalous case of, [Rowntree & others] *411
cardiac, Chlotride for, [Richterich] 2194—ab
from insect bites, prevention, treatment, 360
in pregnancy, acetazolamide in, [Morra] 2070—ab
in pregnancy, chlorothiazide evaluated for, [Chesley] 2071—ab
low-sodium diets in, (Council report) [Danowski] *1886
pulmonary, intractable, emergency commissurotomy in, [Wessel & Webster] *1214
refractory, osmotic diuretic for, [Bernstein] 104—ab
EDEMA—Continued
treatment: chlorothiazide, [Michelsen] 2196—ab
EDUCATION
aspects of athletics for children, [Hein] *1434
in motor vehicle accident prevention, [Neyhart] *2209
Joint Committee on Health Problems in, annual report, 1080
undergraduate research supported by National Science Foundation, 1668
EDUCATION, MEDICAL
A. M. A. Council annual report, 1087
American Medical Education Foundation: See Foundations
Annual Congress on: See American Medical Association
cooperation in, annual report, 1088
costs of, Carroll studies on, 1472
4 weeks visit to medical school at Bogota, Colombia, 1391
graduate, A. M. A. Council annual report on, 1091
graduate, annual report and directory of approved internships and residencies, requirements of examining boards in specialties, 521; 694—E
in U. S. and Canada, (annual report) 1090; [Medicine at Work] 1370
internal medicine and training of internists, (Miscellany) [Rhoads] *1398
international exchange, 1522; 1549—E
Medical Education for National Defense (MEND), joint committee on, report, 1072; 1542
number, 58th annual report, Nov. 15, P. 1459
pediatrics in transition, training, [Wheatley] *856; (reply) [DeBacker] 1929—C
plea for improved training in syphilis, [Thomas] 812—C
postgraduate, annual report, 1093
postgraduate cruise to Caribbean, 1142
postgraduate, tax deduction for tuition costs, A. M. A. resolution on, 69
Preprofessional: See Basic Sciences
psychiatric problems and preferences for instruction by general practitioners, [Wittson & others] *1747
sexology and medical students, United Kingdom, 2048
week, annual report of PR Department, 1051
World Conference on, second, 1959, 1485
EDUCATIONAL COUNCIL FOR FOREIGN MEDICAL GRADUATES
A. M. A. reports on, 1090; 1524
"Present and Future Status of Foreign Medical School Credentials in U. S.," annual report, 1089
EFFUSIONS: See also Pleura; Pleurisy
malignant, prednisone for, [Franco & others] *1645
EJACULATION
retrograde, as cause of sterility in male, [Schellen] 1578—ab
ELASTIC Dacron prosthesis, clinical use, [Szilagyi] 2305—ab
ELECTIONS
Younging of Electorates, annual report on, 1081
ELECTRIC
activity of muscles in infantile cerebrospastic paralysis, India, 92
clippers, sterilization of, 362
current, changes in skin as result of, [Winer] 2073—ab
stimulation during lumbar sympathectomy, effective level determined by, [Randall] 444—ab
ELECTROCARDIOGRAM: See Heart
ELECTROENCEPHALOGRAPHY: See Brain
ELECTROLYTES
excretion in preeclampsia, influence of chlorothiazide on, [de Alvarez & O'Lane] *2226
inverted response after total adrenalectomy, [Llaurado] 826—ab
renal excretion, effect of chlorothiazide on, [Lassen] 2196—ab
study during myasthenic crisis after removing cystic thymus, [Fongi] 456—ab
ELECTROMYOGRAPHY: See Muscles
ELECTRON MICROSCOPY: See Microscopy
ELECTRONICS
data processing equipment, study how it can be used in hospitals, Tex., 1243
EMBOLISM
peripheral arterial, diagnosis, [Phelan & Young] *1299
pulmonary, arteriosclerosis, myocardial infarction and heart anomalies with pulmonary hypertension, (Diagnostic Problems) [Kushner & Szanto] *277
pulmonary, in lung surgery, [Merlo] 330—ab
pulmonary, management of acute venous thromboembolism to avoid, [Aniyan & others] *725
pulmonary, maternal death due to, by amniotic fluid, [Carone] 2314—ab
EMERGENCY: See also Civil Defense; Disasters
commissurotomy in intractable pulmonary edema, [Wessel & Webster] *1214
medical care study, evaluate task force material in, [Medicine at Work] 773
national medical care plan, status report of activities of commission on, 58; 1071
poisoning, efficient handling, [Bidder & Sunshine] *514
portacaval shunt, [Mikkelsen] 949—ab
surgical treatment of severely bleeding duodenal ulcer, [Westland] 334—ab
treatment of chemical eye injuries, water in, (Council report) 47
treatment of corrosive esophagitis, France, 1255
EMORY UNIVERSITY
chair of tuberculosis and pulmonary diseases at, new, 790
EMOTIONS
problems after organic brain disease, treatment, 136; (replies) [Paley; and original consultant] 2086
EMPHYSEMA
acute emphysematous cholecystitis, [Edinburgh] 824—ab
anesthetist and, [Nunn] 974—ab
climate and, 474
of aged, [Mayer] 1810—ab
pulmonary, hazards of therapy, [Sherman] *1866
EMPLOYEES: Employment: See Industrial Health
EMPYEMA
nontuberculous, New Zealand, 95
staphylococcic, [Magovern & Blades] *365
staphylococcus, in children, [Sia] 1412—ab
tuberculous, topical pyrazinamide for, [Costa] 2324—ab
ENCEPHALITIS
epidemic, India, 1258; 1682
equine, field and laboratory studies, [Feemster] 1418—ab
etiology: Asian influenza, [Furtado] 1409—ab
infectious, outbreaks of, 1245
Japanese B, India, 434
uveo-encephalitic syndrome, [Reed] 1937—ab
ENCEPHALOMYELITIS
myalgica epidemica resembling poliomyelitis, [Gsell] 117—ab
ENCEPHALOPATHY
deficiency in alcoholics, [Lapresle] 827—ab
ENDARTERECTOMY
for peripheral arterial insufficiency, Norway, 1152
for relief of impotence and Leriche syndrome, [O'Conor] 1944—ab
ENDOCARDITIS
bacterial, in children with heart disease, [Cutler] 2316—ab
due to Pseudomonas aeruginosa, prognosis, (reply) [Gottsegen] 1929—C
septic, protracted, antibiotics for, [Chikina] 939—ab
staphylococcic, ristocetin for, [Weber] *1346
ENDOCARDIUM
fibroelastosis, surgical treatment, poudrage technic, [Paul] 112—ab
ENDOCERVICITIS: See Uterus
ENDOMETRIOSIS
of diaphragm, chronic recurring spontaneous pneumothorax due to, [Maurer & others] *2013
ENDOMETRIUM
Cancer: See Uterus Cancer
ENDOSCOPY
in diagnosis of bladder neck obstruction, [Ray & Cervantes] *395
in treatment of parenchymal tuberculosis, [Carabelli] 1158—ab
of biliary tract, Germany, 1679

ENGINEERING, sanitary, India, 1258
ENTERIC Cytopathogenic Human Orphans Virus: See ECHO Viruses
ENTERITIS; ENTEROCOLITIS: See Intestines, inflammation
ENTERTAINING
tax deduction of expenses, [Medicine and the Law] 1555
ENURESIS: See Urination, incontinence
ENVIRONMENT
sanitation, India, 767
ENZEON: See Chymotrypsin
ENZODASE: See Hyaluronidase
ENZYMES: See specific enzymes, as Transaminase; Trypsin; etc.
EOSINOPHILIA
tropical, diethyl carbamazine for, India, 1392
tropical, India, 1926
EPIDEMICS: See under specific disease, as Influenza
EPIDEMIOLOGIST
Noah Webster, 4-cent bicentennial stamp honors, (Miscellany) [Thoms] 1804
EPIDIDYMITIS
nonspecific, etiology, treatment, bloody seminal fluid usual accompaniment? 1833
EPILEPSY
annulment of marriage and, United Kingdom, 435
in children, acetazolamide for [Holowach] 955—ab
late onset, 1,000 cases, [Sheehan] 455—ab
minor motor; diagnosis, treatment, prognosis, [Livingston] 463—ab
postoperative, in brain abscess, [Kerr & others] *868
psychomotor, temporal lobectomy effects on mental condition in, [Alajouanine] 1410—ab
EPINEPHRINE: See also Arterenol
absorbed systematically from eye, percentage in allergic conjunctivitis, 1832
pharmacological activity, India, 806
EPIPHYSES
dysplasia, multiple, [Barrie] 1269—ab
EPISIOTOMY
midline, Brazil, 88
EQUANIL: See Meprobamate
EQUIPMENT
biomechanical, for long-term preservation of erythrocytes, [Ketchel & others] *404
ERUCTATION
aerophagia with, treatment, 1734
ERUPTIONS
Creeping: See Larva Migrans
exanthem epidemic with aseptic meningitis, [Tyrrell] 1416—ab
Industrial: See Industrial Dermatoses
ERYTHEMA
multiforme, acute virus respiratory infections in children and, [Hölscher] 959—ab
ERYTHREMIA: See Polycythemia
ERYTHROBLASTOMATOSIS
medullary, hemopancytopenic, [Paniagua] 108—ab
ERYTHROBLASTOSIS, FETAL: See Hemolytic Disease of Fetus and Newborn
ERYTHROCIN: See Erythromycin
ERYTHROCYTES
hemolytic trait in Oriental Jews, Israel, 94
in vivo survival of glycerolized and frozen cells, [Tullis & others] *399
long-term preservation, biomechanical equipment for, [Ketchel & others] *404
normal color index, United Kingdom, 2048
transfusion, packed, for liver cirrhosis, India, 1150
ERYTHRODERMA
psoriaticum, Kaposi's sarcoma superimposed on, [Segal] 465—ab
ERYTHROMYCIN
antibacterial activity of serum after, [Kunin] 2071—ab
hazards of, [Herrell] *1875
treatment plus ristocetin in staphylococcic endocarditis, [Weber] *1346
ERYTHROPLASIA OF QUEYRAT
metastasizing, fatal, [Witham] 465—ab
ESCHERICHIA
coli, division inhibition and filament formation of, ultraviolet light to study, [Deering] 1723—ab
coli enteritis, [Balaban] 341—ab; (in nurslings) [Taimbier] 342—ab
coli strains isolated in 1957, sensitivity to antibiotics, [Tóth] 123—ab
colisepsis as cause of icterus gravis neonatorum, [Pielage] 833—ab
ESOPHAGITIS
as cause of upper abdominal pain, [Bernstein & others] *27
corrosive, emergency treatment, France, 1255
peptic, and peptic ulceration of esophagus, [Wolf] 128—ab
reflux, with stricture, jejunal interposition operation for, [Thomas & Merendino] *1759
ESOPHAGUS
cancer, tolazoline and lymph node biopsy in, Brazil, 2046
ESOPHAGUS—Continued
cardiomyectomy, Heller's surgical treatment of cardiospasm, [Schmidt] 448—ab
cytology by gauze-sponge smear technique, [Hershenson & others] *1871
gastroesophageal mechanism, experimental studies, [Meiss] 1290-ab
lower ring, pathology of case observed for 9 years, with autopsy, [MacMahon] 968—ab
megaesophagus in Brazilian trypanosomiasis, 89
peptic ulceration and peptic esophagitis, [Wolf] 128—ab
tuberculous fistula, surgery for, [Pecora] 446—ab
varices before and after portacaval shunts, [Evans] 129—ab
varices, bleeding, venous shunts for, [Youngblood] 2183—ab
ESSAY CONTESTS: See Prizes
ESTROGENS: See also specific preparations
clinical use in uterine prolapse, [Anderson] *173
"depot," for prostate cancer, [Salsano] 1287—ab
production correlated with clinical results in breast cancer, [Bulbrook] (after oophorectomy) 947—ab; (after adrenalectomy or hypophysectomy) 948—ab
treatment plus androgens for degeneration of teeth? 2333
ETHICS, MEDICAL
case of druggist and disappearing rental, [Medicine at Work] 1896
National Interprofessional Code for Physicians and Attorneys, 166—E; [Medicine and the Law] 1663
opinions of Judicial Council, 1555
Principles of, opinions and interpretations of, Judicial Council annual report, 1086
ETHYL AMINOBENZOATE
absorption of local anesthetic, [Campbell & Adriani] *873
ETHYLENEDIAMINE-TETRAACETIC ACID: See Edathamil
EXAMINATIONS
Physical: See Physical Examination
EXANTHEMS: See Eruptions
EXECUTIVES
dysphonia in, [Gardner] 1579—ab
health of, United Kingdom, 1153
health problems of directors, United Kingdom, 2048
EXERCISE
for asthmatic children, [Scherr & Frankel] *1996
the physician himself, [McArthur] *1740
EXHIBITS
A. M. A. Bureau annual report, 1075
award symposium on arthritis and rheumatism, 903
for health exposition invited, N. Y., 2158
on film, annual report on, 1073
traveling, annual report on, 1073
EXOPHTHALMOS
malignant, transantral decompression for, [Walker] 951—ab
EXPLOSIONS: See also Atomic Energy
hazards of vaporized alcohol, (reply) [Kneedler] 984
EXTREMITIES
gangrene of, after cardiac infarction and noradrenaline therapy, [Greenbaum] 125—ab
lower, movable footrest for elevation of, [Fox] *1647
lower, skin coverage in children, [Wynn] *154
operations, intraosseous anesthesia in, [Okhotsky] 1825—ab
relation between condition of limbs and capacity for work in old age, Denmark, 208
Vascular disease: See Arteries; Arteriosclerosis; Blood Vessels
EYEGLASSES: See Glasses
EYES
"blinking" in child, cause, therapy, 137
carcinoma, metastatic, treatment, [Buxeda] 345—ab
constant twitching of, cause, treatment, 982
injuries, chemical, water in emergency treatment, (Council report) 47
newborn, incidence of conjunctivitis after silver nitrate and oxytetracycline in, [Mathieu] 121—ab
ocular senescence, Belgium, 2290
ophthalmoscopic examination during pregnancy, Brazil, 706
percentage of epinephrine absorbed systematically from, in allergic conjunctivitis, 1832
proptosis after explosion of fluorescent tube, 1295
safety equipment, (Council report) 47
Toxoplasma recovery from, [Hogan] 2321—ab
toxoplasmosis, [Hogan] 2322—ab
EYESIGHT: See Vision

F

FAIRS: See also Science fairs
health, Bureau of Exhibits annual report on, 1075
FAITH HEALING by clergymen, United Kingdom, 2171
FALLOPIAN TUBES: See Oviducts
FAMILIES: See also Heredity; Twins
antibiotic resistant staphylococci infections in, caused by exposure of babies in hospital nurseries, [Hurst] 1826—ab
cyclic neutropenia in father and daughter, [Hahneman & Alt] *270
familial congenital hyperplasia of adrenal cortex, [Birke] 2182—ab
familial Mediterranean fever, [Heller] 821—ab
familial thalassemia and erythremic myelosis, [Olshin] 1281—ab
hazards of using parental blood for measles modification, (replies) [Berryhill; and original consultant] 1170
listeriosis in mother and child, [Kranendonk] 1275—ab
multiple cases of poliomyelitis in one family, [Scarabicchi] 827—ab
parental brutality as etiologic factor in first-degree murder, [Duncan & others] *1755
simultaneous occurence of moderate hemophilia and thrombopathy in one family, [van Creveld] 1812—ab
staphylococcal infection in mothers and infants, maternal breast abscesses and antecedent neonatal sepsis, [Monro] 1275—ab
true hermaphrodite siblings, [Milner] 467—ab
2 cases of de Toni-Fanconi syndrome with cystinosis, [Worthen] 121—ab
FARM-CITY WEEK
annual report on, 1051
FARMERS
chronic silo filler's disease, [Schell] 963—ab
FAT
body, determination, India, 2292
dietary, and cholesterol, hypercholesteremia induced by in monkeys, [Cox] 969—ab
high, and high-cholesterol mash, effects of dietary protein and carbohydrate on cholesterolemia and atherogenesis in cockerels on, [Stamler] 976—ab
high in diets for obesity, and fatty acids, United Kingdom, 2046
intake, physical activity, and blood coagulation, United Kingdom, 1682
metabolism and psoriasis, relationship, 716
FATHER: See Families
FATIGUE
treatment, France, 431
FATTY ACIDS
high-fat diets for obesity and, United Kingdom, 2046
FEDERAL: See also United States
Bureau of Investigation, persons wanted by, (photos) (G. E. Cole and Y. Conley), 1384; (L. Manson), 2160
Civil Defense Administration: See Civil Defense
Communications Commission, proceedings before, annual report of Law Department, 1044
FDA: See Food and Drug Administration
Legislation: See Laws and Legislation
medical services, (A. M. A. Committee annual report) 1103; (A. M. A. conference on) 2150
FEEBLEMINDEDNESS: See Mental Deficiency; Phenylketonuria
FEES
A. M. A. Bureau of Medical Economic Research annual report on, 1080
bill for indigent care anyway? [Medicine at Work] 1893
for anesthesia in hypnosis, United Kingdom, 2046
Medicare effect on, [Robinson] *1630
oldsters, insurance, A. M. A. meeting, report, 2148
physicians', Japan, 806
surgeon's, when visiting surgeon operates, Canada, 431
FELLOWSHIPS
American Cancer Society, Ill., 198
approved, according to specialties, 561; 694—E
arthritis, awards open, 79
blindness research, 2032
cardiovascular, at U. of Mississippi, 1240
Donner, winners announced, 78
educational values of USPHS programs, 1525
for women, 1668
French Nestlé Company, for study of nutrition, 78
heart research in Central Ohio, 295
heart research study at U. of London, W. Va., 1142
Mannheimer Memorial Fellow at May Institute for Medical Research, Cincinnati, 1242
medical neoplasia, N. Y., 794
National Institutes of Health, in metabolic diseases, 1915
National Science Foundation, (applications due Oct. 15) 425; 1530
nutrition, annual report, 1058
ophthalmology, winners, 298
pediatric, 911; 912; 1244
Picker (James) Foundation in radiology research, 79

FELLOWSHIPS—Continued
postdoctoral, programs of National Academy of Sciences-National Research Council, survey, 1478
radiological physics, 1563
rehabilitation, Arde Bulova Memorial, created, 2033
research in clinical nutrition, applications open, (Council announcement) 768
respiratory diseases, 912
surgical travel fund from U. of Minnesota, 1382
USPHS stipends increased, 1671
Wellcome Foundation, for travel in Europe, N. Y., 793
FENESTRATION
tracheal, indications and contraindications for, [Mayer & others] *169
FERROUS: See Iron
FERTILITY: See Sterility
FERTILIZERS
hazards of chromium and nickel in, 1061
FETUS
blood loss with placenta previa, 1168
cardiac infarction in, [Schuler] 1412—ab
death of, anatomoclinical study, central nervous system lesions, [Chosson] 119—ab
Erythroblastosis: See Hemolytic Disease of Fetus and Newborn
hydramnios in diagnosis of congenital obstruction of alimentary tract; maternal and fetal factors, [Lloyd] 462—ab
malformations, origin of; case of rare monster, [de Gennaro] 2313—ab
maternal nutrition and, (Council article) [Hepner] *1774
perinatal study project and exhibit, annual report, 1108
persistence of fetal ductus function after birth, ductus arteriosus as avenue of escape, [Abrams] 1280—ab
prenatal heart electrocardiogram, 1836; (and phonocardiogram, United Kingdom) 2295; [Bergman] 2315—ab
progesterone for threatened abortion have adverse effect on? 473
salvage in Rh incompatability, [Bowman] 339—ab
vagitus uterinus: cry in uterus, [Iklé] 459—ab
FEVER
Gumma, Japan, 1393
mechanism of, United Kingdom, 312
Mediterranean, familial, [Heller] 821—ab
treatment: acetylsalicylic acid vs. salicylamide, (replies) [Woodbury] 1259—C; [Bass] 1684—C
unidentified, Dr. Hammon on mission to Thailand to serve as consultant on, Pa., 910
West Nile, outbreak in Israel, [Spigland] 440—ab
FIBRINOGEN
Afibrinogenemia: See Blood fibrinogen
FIBRINOLYSIN
treatment of thrombosis, [Sokal & others] *1314
FIBROELASTOSIS: See Endocardium
FIBROMA
of bronchus, [Rodé] 437—ab
FIBROSARCOMA
neurofibrosarcoma of cranial nerve origin, [Economou] 951—ab
pulmonary, risk of developing active tuberculosis, [Chase] 2059—ab
retroperitoneal, idiopathic; involving ureters, aorta, and vena cava, [Hackett] 1707—ab
FIBROSIS, Cystic: See Pancreas
FILARIASIS
chronic, changes in plasma proteins and lymph proteins, India, 1798
of scrotum, India, 1682
FILTER
pollen, most effective type, 1593
FIRE
fatalities from, N. C., 2159
hazards of vaporized alcohol, (reply) [Kneedler] 984
FIRST AID
handling of poisoning emergencies, [Bidder & Sunshine] *514
FISH: See also Shellfish
contaminated, minamata disease caused by, United Kingdom, 1683
FISTULA
arteriovenous, congenital coronary artery, surgery for, [Fell] 1705—ab
fluid, persistent post-traumatic, [Calvet] 1705—ab
intrarenal arteriovenous, with hypertensive cardiovascular disease, [Milloy] 823—ab
traumatic aortic-right ventricular, surgical repair, [King] 114—ab
tuberculous, of esophagus; surgery for, [Pecora] 446—ab
tuberculous, trypsin for, [Rapoport] 1581—ab
FITNESS: See Physical Fitness
FLASH blindness and chorioretinal burns produced by atomic flash, (guest editorial) [Byrnes] 778—E
FLAXEDIL: See Gallamine Triethiodide

FLUIDS
free tissue, in female mammary gland, occurrence and significance, [Ratzenhofer] 1276—ab
injection, forcible, into arteries in terminal states, [Radushkevich] 1711—ab
FLUORESCENT Lighting: See Lighting
FLUORINE
Fluoridation of Water: See Water
FLUOXYMESTERONE
treatment of advanced breast cancer, [Kennedy] 2325—ab
FLYERS; FLYING: See Aviation
FOLIC ACID
antagonist for choriocarcinoma and related trophoblastic tumors in women, [Hertz & others] *845; 894—E; [Li] 1416—ab
FOOD: See also specific food items, as Fish
A. M. A., Council annual report, 1057
aspiration, United Kingdom, 1152
Filipinos die suddenly during sleep after heavy meal: "bangungut syndrome," [Nolasco] 1403—ab
Infant's: See Infants, feeding
oral bouillon feedings for surgical patient, [Benjamin] 2311—ab
patterns, lower blood lipids by changing, [Brown & Page] *1989
poisoning, clinical-neurologic study of botulism, [Castedo] 2303—ab
poisoning from mayonnaise, salmonellosis outbreak in hospital, Denmark, 707
poisoning from shellfish, (Canada) 431; [Bond] 975—ab
poisoning, minamata disease from contaminated fish, United Kingdom, 1683
poisoning, punch in galvanized container, Calif., 798
FOOD AND DRUG ADMINISTRATION
A. M. A. resolution commending, 71
FOOT
footrest, movable, for elevation of lower extremity, [Fox] *1647
neurotrophic ulcers, [Kelly & Coventry] *388
FOOTBALL
for 14-year-old boys, 2331
honor, physicians nominated for, 2281
FORAND BILL
annual reports on, 1047; 1049; 1052
type of legislation, A. M. A. resolution opposing, 65
FOREIGN BODIES
in kidney, needle within calyces, [Naulleau] 344—ab
soft drink bottle in peritoneal cavity, [Hope & Thedieck] *40
FORENSIC MEDICINE: See Medical Jurisprudence
FOREST, Kyasanur, disease, India, 804
FORMALDEHYDE
hazard in workers exposed to it, (replies) [Zavon; and original consultant] 1298
FOUNDATIONS
Allergy Foundation of America, student awards, 298
American Foundation for Tropical Medicine, grant to support activities of Liberian Institute, N. Y., 1241
American Medical Education, (annual report) 1119; (activities) 1475; (put it "over the top") 2147—E; (receives checks) 2150
American Rehabilitation, sponsors symposium on basal ganglia surgery for involuntary movements, (reply) [Krusen & Ellwood] 319—C
Arthritis and Rheumatism, fellowships, 79
Bailey (Mary), shop for surgical needs donated to, at Hahneman Hospital, Pa., 1789
Barker Welfare, grants for allergy awards, 298
Bennett (A. E.) Neuropsychiatric Research, annual award made possible by, 200
Charitable, Educational, and Scientific Foundation of Medical Society of Wisconsin co-sponsors symposium on bone (Program) (Council article) 520
Ciba, awards for aging research, 77
Donner Foundation of Philadelphia, x-ray generator gifts, (Conn.) 1665; (Pa.) 1912
Easter Seal Research, grants for bone research, 80
Ford, grant to Bronx Hospital, N. Y., 2279
Gairdner, first international awards in arthritis and heart disease, 2281
Hanna Fund grant to Western Reserve U., 2157
Hartford (John A.), grants, 1243; 1787
Hematology Research, grants, 794
Kellogg (W. K.), (grant to U. of Michigan for research and training in Public Health) 1246; (grant to university in Colombia) 1391; (to Chilean) 2280
Kenny (Sister Elizabeth), (co-sponsors basal ganglia surgery symposium) [Krusen & Ellwood] 319—C; (scholarships) 1561; (moves in-patient facilities to rehabilitation institute, Detroit) 2157
Kresge, grant to Wayne State U., 1382
Langer (Ann) Cancer Research Foundation award, 2280

FOUNDATIONS—Continued
Life Insurance Medical Research, heart research fellowships, W. Va., 1142
Lovelace, first annual award, Pa., 2031
McGregor Fund, grant to Wayne State U., 1381
National Foundation, grants, 908; 1383
National Foundation for Research in Cutaneous Medicine formed, 1144
National Fund for Medical Education, (established research program) 200; (activities) 1476
National Neurological Research; awards, 1143
National Science, (fellowships, applications due Oct. 15) 425; (new address) 1383; (activities) 1529; (support undergraduate research) 1668
Nuffield Foundation bounty, United Kingdom, 2295
Nutrition Foundation, (grants) 78; (annual report on A. M. A. cooperation) 1058; (supports education, hereditary galactose disease) (Council report) [Guest] *2015
Ontario Alcoholism Research, reports, 1679; 2291
Pfeiffer (Gustavus and Louise) Research, grants for allergy awards, 298
Picker (James), radiology research grants, 79; 1245
Research Corporation, grants by, 2033
Rockefeller, grants, 75; 1391; 1681; 1791; 2296; 2279
Sears-Roebuck, A. M. A. cooperates on brochure on Business Side of Medical Practice, 818; 935; 1114; 1155; 1262; 1401; 1691; 1806; 1932; 2050; 2176
Wellcome, fellowship for travel in Europe, N. Y., 793
Whitney (Helen Hay), select first recipient of T. Duckett Jones Memorial Award, 1669
Wolfson, new charitable foundation, United Kingdom, 312
World Rehabilitation Fund, created fellowship in rehabilitation, 2033
FRACTURES
activation of patient with skeletal metastatic neoplasia, [Cummings & Rosenthal] *501
diagnosis, auscultation as important aid to, [Colwill] 116—ab
dislocation of atlas on axis, value of early fusion of C-1, C-2, and C-3, [Alexander] 453—ab
supracondylar, of humerus in children, complications and problems of traction treatment, [Staples] *730
FRAMBESIA: See Yaws
FRAMYCETIN
United Kingdom, 808
FREEZING
suspended animation, United Kingdom, 1152
FRUCTOSE
utilization of dextrose and, India, 798
FUNDS: See Foundations
FUNGI: See also Mycosis
mycology of mouth, (United Kingdom) 2046; (contribution to) [Fox] 2302—ab
FUNNEL CHEST: See Thorax
FUREY, WARREN W. (1898-1958)
death of, 1793
FURUNCULOSIS
chronic, recurrent, 842
in miners, epidemiology of, [Ruys] 963—ab

G

GALACTOSE
disease, hereditary, (Council report) [Guest] *2015
GALLAMINE TRIETHIODIDE
treatment of tetanus, India, 805
GALLBLADDER
absence, congenital, [Pines] 953—ab
calculi, gallstone ileus, [Rijken] 953—ab
calculi, statistics; indications for cholecystectomy, [Enderlin] 2064—ab
disease, cholelithiasis, hiatus hernia, and diverticulosis coli, [Foster & Knutson] *257
dye, coronary insufficiency after oral administration of, [Littman] 352—ab
inflammation, acute emphysematous cholecystitis, [Edinburgh] 824—ab
inflammation, acute pneumocholecystitis, [Consoni] 2065—ab
roentgen study, oral, and liver function tests, correlation, 2082
GAMMA GLOBULIN
agammaglobulinemia and hypogammaglobulinemia, contribution to study of, [Antonucci] 444—ab
antivaccinal, United Kingdom, 2048
demonstrate rubella neutralizing antibody in, re-evaluation of rubella problem, [Krugman] 1281—ab
hypogammaglobulinemia and bronchiectasis, [de Meulemeester] 712—ab
GANGLION (nerve)
basal, operations, 5-year study of 700, [Cooper] 2067—ab

GANGLION—Continued
basal, surgery for paralysis agitans, symposium on, (reply) [Krusen & Ellwood] 319—C
blocking agent for hypertension, new long acting, oral, [Locket] 1582—ab
GANGLIONEUROMA
of cervical autonomic system, [Smyth] 447—ab
GANGRENE
arterial thrombosis with, after use of promazine, [Opinsky & others] *1224
of extremities after cardiac infarction and noradrenaline therapy, [Greenbaum] 125—ab
GARTNER DUCT
uterine carcinoma with origin in, [Andujar] 2191—ab
GAS
in pancreas as sign of abscess, [Agnos] 944—ab
producing bacteria, acute pneumocholecystitis from, [Consoni] 2065—ab
sewer, pathologic effects of exposure to over period of 2 years, 716
tear gas exposure, treatment, 1167
GASOLINE
fumes, urge to inhale, in boy 5, treatment, 981
GASTRECTOMY: See Peptic Ulcer; Stomach, surgery
GASTRIC: See Stomach
Ulcer: See Peptic Ulcer
GASTRITIS: See Stomach inflammation
GASTROENTERITIS
coliform organisms in epidemic diarrhea in infants, Canada, 1677
GASTROINTESTINAL TRACT
cancer, calcification in, [Matthews] 332—ab
dietary therapy committee, report on, 1058
diseases, diagnostic value of serum transaminase, [Pryse-Davies] 443—ab
effects of penetrating nuclear radiation, [Gerstner] *381
effects of reserpine on, New Zealand, 432
hazards of certain therapeutic agents, [McHardy] *1868
hemorrhage, rare causes, diagnosis and management, [Maloney] *1604
hemorrhage, upper massive, surgical treatment, [Cooper] 333—ab
muscle, morphology in avitaminosis E in cystic fibrosis of pancreas, [Blanc] 2071—ab
obstruction, congenital, hydramnios in diagnosis; maternal and fetal factors, [Lloyd] 462—ab
GAUZE
sponge smear technique in esophageal cytology, [Hershenson & others] *1871
GEMS, [Leisure Corner] 1261
GENERAL PRACTICE
A. M. A. Committee on Preparation for, progress reports, 56; 1087; 1484
creation of Board on, A. M. A. resolution on, 897
evaluating, United Kingdom, 2049
in National Health Service, United Kingdom, 314
psychological medicine in, United Kingdom, 1573
GENERAL PRACTITIONERS
A. M. A. General Practitioner Award: See A. M. A.
British, think we are making same mistakes British doctors made, (Miscellany) 931
hospital physician changes place with, Denmark, 706
merit awards for, United Kingdom, 98
pay dispute, plea for presentation of case to Court of Sessions fails, United Kingdom, 2172
psychiatric problems and preferences for instruction, [Wittson & others] *1747
GENETICS: See Heredity
GENITALS
cancer, A. M. A. Subcommittee annual report on, 1060
cancer, testosterone enanthate for, [Giornelli] 1583—ab
tumors, lymphangioma in children, [Gueukdjian] 1279—ab
GENITOURINARY SYSTEM
aspects in management of severely injured patient, [Schulte] *2094
focus in rheumatic disorder in male, [Domeij] 342—ab
tuberculosis, diagnosis and therapy, [Ljunggren] 1414—ab
tuberculosis; PAS, streptomycin and isoniazid for, [Hansson] 1720—ab
tuberculosis, United Kingdom, 925
GENTIAN VIOLET: See Methylrosaniline
GEOGRAPHY
residence restrictions and attrition, 1511
source of entering medical students, 1507; 1508; 1510
GERIATRICS: See Old Age
GIARDIASIS (lambliasis)
treatment, chlorquinaldol, Brazil, 1391
von GIERKE'S DISEASE: See Glycogen storage disease
GIRLS
precocious puberty in, and hormone excretion, [Bulbrook] 1819—ab
GLANDULAR FEVER: See also Mononucleosis, Infectious
acquired toxoplasmosis resembling, United Kingdom, 924
GLASSES
indicated in amblyopia ex anopsia? 1732
misconceptions about, 1785—E
GLAUCOMA
chronic, acetazolamide in, [de Carvalho] 344—ab
drugs contraindicated in, 1838
GLIOBLASTOMA
multiforme; natural history, pathology, diagnostic methods, treatment, [Frankel] 1813—ab
GLIOMA
of optic nerves, [Dodge] 336—ab
GLOBULIN: See also Gamma Globulin; Poliomyelitis Immune Globulin
antihemophilic, deficiency, hemorrhagic capillary disorder with, [Valberg] 2180—ab
cholesterol complex in blood in multiple myeloma, [Schless] 128—ab
macroglobulinemia, Waldenström's, resembling multiple myeloma, [Hampton] 821—ab
GLOBUS PALLIDUS: See Lenticular Nucleus
GLOMERULONEPHRITIS: See Nephritis
GLUCOCORTICOIDS: See Corticosteroid Hormones; and individual preparations as Cortisone
GLUCOSE
in Blood: See Blood sugar
utilization of levulose and, India, 708
GLUTAMIC oxalacetic aminopherase: See Transaminase
GLUTAMISOL: See Bemegride
GLYCERIN
biochemical equipment for long-term preservation of glycerolized erythrocytes, [Ketchel & others] *404
in vivo survival of glycerolized and frozen red blood cells, [Tullis & others] *399
GLYCERYL TRINITRATE
new concepts of coronary heart disease, [Beck & others] *2110
treatment of myocardial infarction? 1297
GLYCOGEN
hepatic glycogenesis, effects of corticosteroid hormones upon, [Fodden] 969—ab
storage disease of heart, in 5 infants, [Friedman] 221—ab
storage disease, pituitary extract to increase growth in boy with? 1594
GLYCOSURIA
diabetes, and pheochromocytoma, [Freedman] 1703—ab
GOITER
simple, France, 803
GOLD
radioactive, for ovary cancer, WHO report, 1397
GONADOTROPINS in Urine: See Urine
GONORRHEA
acute salpingitis, prognosis and treatment, [Hedberg] 1162—ab
GOUT
gouty arthritis and, internist's interpretation of orthopedist's experience with, [Talbott] 2302—ab
tophaceous, chronic, surgical management, [Larmon] 954—ab
GRADUATES
A. M. E. F. alumni appeal relations, annual report, 1120
contributions to schools from, annual report, 1120
Foreign: See Educational Council for Foreign Medical Graduates; Physicians, foreign medical, 1521
GRANULOCYTOPENIA
cyclic neutropenia in father and daughter, [Hahneman & Alt] *270
neutropenia complicating staphylococcic endocarditis treated with ristocetin, [Weber] *1346
GRANULOMA
giant-cell, respiratory (Wegener's granulomatosis), [Walton] 1404—ab
nonspecific granulomatous disease of stomach, [Goldgraber] 819—ab
GRANULOMATOSIS
pathergic (Wegener's granuloma) of lung, [Hood] 944—ab
GRAY, HENRY (1825-1861)
Gray's Anatomy, centenary celebrated, United Kingdom, 1152
GREAT BRITAIN, See also British: National Health Service; Royal
voluntary health insurance in, surprising growth of, [Follmann] *1641
GREENLAND'S invalids, Denmark, 920
GRICE PROCEDURE: See under Arthrodesis
GRISEOFULVIN
treatment of experimentally induced ringworm in guinea pigs, United Kingdom, 810
GROWTH
child, statistics on, 2159
"GUIDES": See American Medical Association; Societies, Medical
GUMMA fever, Japan, 1393
GUMS
changes in, diagnosis of systemic disease, [Hopp] *748
pigmentation, diagnosis, 1296
GYNECOLOGY
physiological basis for hormone therapy in female, [de Alvarez & Smith] *489
World Congress on, Canada, 89
GYNECOMASTIA: See Breast hypertrophy

H

H-BOMB: See Hydrogen Bomb
5HIAA: See 5-Hydroxyindoleacetic Acid
HAIR
brush, nylon, [Savill] 2319—ab
clippers, electric, sterilization of, 362
dressers, carbon tetrachloride poisoning in, [Warshaw] 716—C
excessive, in adolescent girls, treatment, 983
Loss of: See Alopecia
thinning of, in women, cause, treatment, 137
HALLUCINATIONS
hallucinogenic drugs as adjunctive treatment of alcoholism, [Smith] 2068—ab
HALOTESTIN: See Fluoxymesterone
HANDICAPPED
"hire the handicapped—it's good business," [Medicine at Work] 1368
HANDWRITING
changes in intoxication, (Committee report) [Bogen] 48
HAPTENE
desensitization of Rh-negative mother with? 2207
HARELIP
in second generation, prevent defect in third generation, 1957
HAY FEVER
factors influencing evaluation of drugs in, especially timing, (reply) [Engelsher] 1685—C
seasonal allergic rhinitis, incidence of complications after antihistamine therapy compared to hyposensitization, 2208
treatment, inhalation of negative airborne ions proposed for, 1059
HEAD
flattening of one side in infant 11 months old, treatment, 135
infant, transillumination, demonstrated by hydranencephaly, [Griffiths] 1713—ab
injuries, severe, treatment, [Maciver] 2062—ab
injury, etiologic relation of muscular dystrophy to, 1422
injury, loss of smell after, 1423
HEADACHE
during coitus, cause and treatment, 2081
icy cold nose with, in healthy woman going through menopause, cause, 2084
in contrecoup brain damage, cause, treatment, 2081
smoking in etiology of, 1954
spinal-tap, technique to avoid, [Brocker] *261; (correction) 913
HEAF TEST
multiple-puncture technique for tuberculin test, 716
HEALTH
agencies, voluntary, cooperation in raising of funds for health causes, A. M. A. resolution on, 71
A. M. A. program for older citizens, annual report, 1101
associations, A. M. A. meets with 10 'third party' chiefs, [Medicine at Work] 1366
care of aged, Joint Council to improve, formed this year, 1102
centers, management and union, A. M. A. guides for evaluation, annual reports, 1066; 1111
centers, union, 1958 survey of, (Council articles) 904; 1234; 1066; 1112
community council questionnaire for practicing physicians, [Babow & others] *268
education, A. M. A. Bureau annual report, 1076
education in industry, Committee on, annual report, 1067
Examination: See Physical Examination
exhibits, annual report, 1075
exposition, exhibits invited, N. Y., 2158
fairs, annual report of Bureau of Exhibits on, 1075
federal spending for 1959, 1452
fitness, annual report on, 1078
forum, Rochester, N. Y., adventure in public relations using television, [Townsend & Steinhausen] *1983
forums for public in Brooklyn, 1382
fund solicitations, A. M. A. resolution on, 2149
groups, 5 with one aim: improve patient care, [Medicine at Work] 1894
hazard from high-power radio stations, United Kingdom, 2174
in Denmark, 1924

HEALTH—Continued
Indian, meeting on, Neb., 2157
Industrial: See Industrial Health
Insurance: See Insurance; Medical Service plans
Joint Committee on Health Problems in Education: See Joint Committee
National Health Service: See National Health Service
problems of directors, United Kingdom, 2048
program, positive, for senior citizens, proceeding available, (Council report) 1554
public, and clinical practice, problems related to aging and long-term illness, physician relationships, [Underwood] *1000
public, and insurance plan, Canada, 1678
public, aspects of aging population, WHO report, 928
public, new department in Monroe County, N. Y., 419
public, program for municipal research in New York City, 1667
public, state institute of, Norway, 1572
Rural: See Rural Communities
service reviewed, New Zealand, 1570
standards, Israel, 2043
USPHS, Commissioned Officer Student Training and Extern Program, 425
USPHS conferences for medical society committees on aging, 1102
USPHS, educational values of grants and training awards programs, 1525
USPHS grants, 74; 197; 199; 295; 417; 420; 701; 790; 798; 909; 911; 1139; 1140; 1239; 1240; 1241; 1249; 1381; 1384; 1557; 1560; 1671; 1911; 1915; 2028; 2157; 2279
USPHS, home care programs, 167: 1651, July 26, 1958; (correction) 168: 81, Sept. 6, 1958
USPHS, "Immunization Information for International Travel," new edition, 914
USPHS, more than 9,000 grants in one year, 1249
USPHS recommends Asian influenza vaccination for certain groups, 82; 798
USPHS research grants awarded in July and August, 1248
USPHS water pollution report, 2035
workers, training, grants for, 798
World Health Organization: See World Health Organization
HEARING
conservation program, Michigan's, 1558
noise: is it a health problem? [Glorig & Summerfield] *370
screening test for school children, method, 1832
tests in patients with degeneratio pigmentosa retinae, [Alberth] 1284—ab
tractor noise effects on auditory sensitivity of operators, [Lierle] 1721—ab
HEART
amyloidosis, [Mulligan] 348—ab
Anomalies; See also Ductus Arteriosus, patent
anomalies, high defects of atrial septum, [Lewis] 445—ab
anomalies, syndrome of left ventricular-right atrial shunt, successful surgical repair, [Gerbode] 2187—ab
anomalies, thrombopathies with, [Alagille] 326—ab
anomalies with pulmonary hypertension, arteriosclerosis, pulmonary embolism, and myocardial infarction, (Diagnostic Problems) [Kushner & Szanto] *277
arrest, acute, problems and its treatment, [Spohn] 1408—ab
arrest during surgery or anesthesia, miniature R-wave monitor to detect, [Veling] *753
arrest, electrye, under moderate hypothermia, [Riberi] 838—ab
arrest, problem of, [McCarthy] *2101
Artificial: See Oxygenator-Pump
block, complete, artificial pacemaker and myocardial electrode to control, [Weirich] 822—ab
complications of hypertension, [Cornish] 1697—ab
dextroversion, syndrome of, [Grant] 968—ab
disease, chronic valvular, and brucellosis, [Peery] 1810—ab
disease, current status of pregnant cardiac, [Kaufman] 338—ab
disease, factors in decline of maternal mortality, [Klein & Clahr] *237
disease in children, bacterial endocarditis in, [Cutler] 2316—ab
disease, incidence in physicians, [McArthur] *1740
disease, international awards in, 2281
disease, ischemic, coronary arteriographic study in, [Thal & others] *2104
disease, ischemic, United Kingdom, 1574
disease, low-sodium diets in, (Council report) [Danowski] *1886
disease, patient and physician in symptom formation, [Chambers & others] *1617
disease, rehabilitation, [Williams] 962—ab
disease (rheumatic), effect of acute digitalization in, [Werkö] 1575—ab
disease (rheumatic), effect of competitive industrial activity in, [Slipyan] *147, 190—E
HEART—Continued
disease, study in patients dying with portal cirrhosis, [Lunseth] 2180—ab
edema, Chlotride for, [Richterich] 2194—ab
electrocardiogram interpretation, France, 91
electrocardiogram of infants, India, 921
electrocardiogram, prenatal fetal, 1836; [Bergman] 2315—ab
electrocardiogram, prolonged QT interval, syncope, and sudden death in congenital deaf-mutism, [Levine] 1818—ab
glycogen storage disease of, in 5 infants, [Friedman] 221—ab
in-industry conference, Chicago, 1381
Infarction: See Myocardium
Inflammation: See also Endocarditis: Myocarditis; Pericarditis
inflammation (rheumatic) after commissurotomy for mitral stenosis, [Golubev] 104—ab
insufficiency (congestive failure) in 46-year-old woman, (Diagnostic Problems) [Kushner & Szanto] *277
insufficiency (congestive failure), reversible nephrotic syndrome with, [Burack] 2298—ab
murmurs, precordial, during pregnancy and lactation, [Hurst] 1939—ab
new facts about, anoxia and hypoxia, (reply) [Hyman] 1154—C
pacemaker and intravenous isoproterenol for asystole complicating acute myocardial infarction, [Solarz & others] *2124
percutaneous left ventricular puncture with catheterization of aorta, [Fleming] 447—ab
perforation during catheterization and selective angiocardiography, [Escher] 1696—ab
phonocardiography and electrocardiography of fetus, United Kingdom, 2295
rate, evaluation of newborn infant, [Apgar & others] *1985
research fellowships available in central Ohio, 295
research, funds for, 298; (Calif.) 2277
right, catheterization, India, 93
rupture, influence of anticoagulants on occurrence of, after heart infarction, [Aarseth: Lange] 1415—ab
Surgery: See also Aorta, Aortic Valve: Arteries, coronary: Heart, anomalies: Mitral Valve; Myocardium: Pulmonary Valve
surgery, hemorrhage and massive transfusion, [Ulin & others] *1971
surgery, management of aortic stenosis, [Glover & Gadboys] *229
surgery, new concepts of coronary disease [Beck & others] *2110
surgery, open, anesthetic problems in cardiopulmonary bypass for, [Keats] 1289—ab
surgery, open, elective cardiac arrest using potassium citrate, [Sones] 2063—ab
surgery, open, under extracorporeal circulation, [Dubost] 1160—ab
surgery, research grants to U. of Colorado, 1239
surgery, studies during immediate postoperative period after total body perfusion, [Matthews] 1708—ab
suspended, syndrome, [Bradlow] 1809—ab
traumatic injury, nonpenetrating, [Parmley] 1823—ab
tumor in right atrium, successful removal under hypothermia, [Krčílková] 2062—ab
HEAT
sterilization of local anesthetics a necessity? [Bridenbaugh & Moore] *1334
stroke, atypical, with hypernatremia, renal failure, and potassium intoxication, [Baxter] 109—ab
HELLER REPORT
annual report on, 1117
Hyland Committee study, amendments to Constitution and Bylaws, 61
HELMINTHS
acquisition by young children in lower Egypt, [Kuntz] 1282—ab
intestinal, India 1680
uveitis caused by, [Kessel] 345—ab
HEMANGIOENDOTHELIOMA
of stomach, [Andreassen] 825—ab
HEMANGIOMA
in infants and children, conservative treatment, [Blackfield] 1710—ab
HEMATOLOGY: See Blood
HEMATOMA
extradural, neurosurgical care of severely injured patient, [Odom] *2087
Subdural: See Meninges
HEMATURIA
in boxers, [Kleiman] *1633
HEMOBLASTOSES: See Hemopoietic System
HEMODIALYSIS: See also Kidneys, artificial
technique, effect and indications, [Gjørup] 1287—ab
HEMOGLOBIN
C disease, homozygous, [Tanaka] 438—ab
methemoglobinemia in infants, United Kingdom, 709
oxyhemoglobin and, in bank blood, biological activity of, 135
regeneration of, India, 920
HEMOGLOBIN—Continued
Vanderbilt study of maternal and infant nutrition, (Council article) [McGanity & others] *2138
HEMOLYSIS
trait in Oriental Jews, Israel, 94
HEMOLYTIC DISEASE OF FETUS AND NEWBORN
ABO incompatibility and, [Valentine] 460—ab
Canada, 1923
frequency of, [Leikin] 958—ab
serum transaminase activity in differential diagnosis of jaundice, [Kove & others] *860
unexplained death from exchange transfusion in, [Taylor] 340—ab
HEMOPERICARDIUM
anticoagulants effects on occurrence of, after heart infarction, [Aarseth: Lange] 1415—ab
HEMOPHILIA
hemophilic syndrome, 27 cases, [Thomas] 966—ab
hemorrhagic capillary disorder with antihemophilic globulin deficiency, [Valberg] 2180—ab
like states in girls, [Quick] 820—ab
moderate, and thrombopathy, simultaneous in one family, [van Creveld] 1812—ab
HEMOPOIETIC SYSTEM
effects of penetrating nuclear radiation, [Gerstner] *381
malignant hemoblastoses, cortisone for, Austria, 1922
HEMORRHAGE: See also specific organ or region
capillary, with antihemophilic globulin deficiency, [Valberg] 2180—ab
control at operation, adrenochrome monosemicarbazone for, [Calnan] 1140—ab
control, care of patient with multiple injuries, [Aufranc] *2091
extradural, after trauma, control of, New Zealand, 95
factors in decline of maternal mortality, [Klein & Clahr] *237
intracranial, diagnosis and treatment in nontraumatic cerebrovascular accidents, [Scott] 2190—ab
intracranial, in cerebral arteriovenous anomalies, [Wood] 1272—ab
massive transfusion and, [Ulin & others] *1971
progesterone-induced withdrawal, test for pregnancy, [Hayden] 1272—ab
splinter, United Kingdom, 315
subungual, in pan washers, [Long] *1226
HEMORRHOIDS
treatment, surgery with or without Proctocaine, India, 433
HEMOSIDEROSIS
idiopathic pulmonary, [Espinoza] 340—ab
idiopathic pulmonary, with hemolytic and hypochromic anemia and elevated cold agglutinins, (Diagnostic Problems) [Kushner & Szanto] *1013
radiologic sign in, [Shanbrom & Zheutlin] *33
HEMOSTASIS
rubber band tourniquet to preserve renal function during partial nephrectomy, [Goodwin & Theien] *179
HEPARIN
radioactive, synthesis and metabolism, [Eiber] 1159—ab
units required to prevent blood coagulation, 167: 1806; Aug. 2, 1958; (correction) 168: 1670, Nov. 22, 1958
HEPATITIS, INFECTIOUS (epidemic jaundice)
chronic, plasma-transaminase activity as index of effectiveness of cortisone in, [O'Brien] 443—ab
Coxsackie infection in infants and children, [Hosier] 1941—ab
etiology: transfusion, safety of liquid plasma, [Bayman & others] *1735; 1784—E
from blood transfusion, Norway, 922
infectious mononucleosis followed or accompanied by? 2333
outbreak on college campus, [Clark] 132—ab
prognosis, [Cullinan] 323—ab
serum, France, 432
serum; hazards of certain therapeutics, [McHardy] *1868
serum transaminase in neonatal period, aid in differential diagnosis of, [Kove & others] *860
viral, after iproniazid therapy, pathology, findings, [Popper] *2235
virus, subacute hepatic necrosis and postnecrotic cirrhosis due to, [Klatskin] 1811—ab
HEPATOLENTICULAR Degeneration: See Lenticular Nucleus
HEREDITY: See also Families; Twins
consanguinous marriage and, in second generation, (replies) [Roderick; and original consultant] 363; 364
factor in experimental congenital malformations produced by dietary measures, (Council article) [Warkany] *2020
genetic background for leukemia and diabetes, 137
harelip and cleft palate in second generation, prevent defect in third generation, 1957

HEREDITY—Continued
hereditary galactose disease, (Council report) [Guest] *2015
hereditary optic atrophy, [Iverson] 345—ab
in etiology of mental deficiency, 1422
of Marfan's syndrome, importance of autopsies, [Marks & Gerson] *1450
serum phospholipids, genetic and environmental influences, [Schaefer] 1950—ab
smoking genotypes, United Kingdom, 212
HERMAPHRODITISM
cloaca with non-adrenal female pseudohermaphroditism, [Sieber] 2072—ab
true, in siblings, [Milner] 467—ab
HERNIA
congenital, of diaphragm in newborn, [Neimeier] 1817—ab
esophageal hiatus, otalgia with, [Malherbe] 952—ab
hiatal, new approach for herniorrhaphy, New Zealand, 1926
hiatus, cause paroxysmal tachycardia? 1423
hiatus, cholelithiasis, and diverticulosis coli, association of, [Foster & Knutson] *257
hiatus, fairly large, bitterness in mouth with, cause, treatment, 136
hiatus, medical treatment, [Flood] 942—ab
hiatus, symptoms similar to those of angina pectoris, (replies) [Schaus; and original consultant] 228
inguinal, in infancy and childhoood, early surgery for, [Kiesewetter] 1711—ab
sliding, esophageal hiatus, [Dagradi] 941—ab
HERPES
mouth lesion prior to menstruation, (reply) [Houk] 844
poliomyelitis immune globulin (human) for oral lesions, N. N. D., 183
progenitalis, treatment, 473
HETHERINGTON, WILLIAM, left A. M. A. to accept position with Reader's Digest, 695
HETRAZAN: See Diethylcarbamazine
HEXOSAMINES in Blood: See under Blood
HIBERNATION, ARTIFICIAL: See Hypothermia, Artificial
HICCUP, postoperative, Belgium, 2290
HILL-BURTON ACT: See under Hospitals
HINCONSTARCH
treatment of pulmonary tuberculosis, [Barry] 837—ab
HIP
trochanteric syndrome, calcareous and noncalcareous tendonitis and bursitis, [Leonard] *175
HIPPEL'S DISEASE: See Retina, angiomatosis
HIRSCHSPRUNG'S DISEASE: See Colon, megacolon
HIRSUTISM: See Hair, excessive
HISTAMINE
carcinogens fixed by, noncarcinogens not so fixed, France 309
HISTOPLASMOSIS
2272—E
mass chest survey at naval station in tropics, [Scalia] 224—ab
HOBBIES: See Physicians, avocations
HODGKIN'S DISEASE
alcohol-induced pain in, [Braun & Shnider] *1882
alcohol sensitivity in, [Tweeddale] 1812—ab
France, 432
principles of prognosis in, [Justin-Besançon] 442—ab
prognosis, [Croizat] 942—ab
treatment, [Moschidis] 959—ab
HOME CARE
for chronically ill, Minnesota societies aim at, [Medicine at Work] 1894
programs in USPHS, 167:1651, July 26, 1958; (correction) 168:81, Sept. 6, 1958
study, organized, annual report, 1107
HOMES for aged, United Kingdom, 1395
HOMICIDE: See Murder
HORMONES
endocrine carcinogenesis, N. Z., 210
excretion in precocious puberty in girls, [Bulbrook] 1819—ab
influence ear eczema during pregnancy? 227
relation between chronic cystic mastitis and breast cancer, [Womack] 2192—ab
sex, diagnostic meaning of calcium metabolism changes after, in mammary and prostatic cancer, [Molinatti] 1947—ab
therapy in female, physiological basic for, [de Alvarez & Smith] *489
HORNER'S SYNDROME
analyze 216 cases, [Giles] 1944—ab
HOSPITALS
accident burden on, A. M. A. bulletin on, 1080
Accreditation: See also Joint Committee on Accreditation of Hospitals
accreditation, A. M. A. part in, resolution on, 68
Air Force Hospitals, new, (photos) 301; 2035
A. M. A.—A. H. A. Liaison, (Committee report) 57; (recommend that hospitals set up joint conference committees) 1233
A. M. A. Council annual report, 1087
HOSPITALS—Continued
approved for internships in Canada, 553
approved residencies according to, 643
Army Reserve, moves, N. Y., 1382
automatic stop order on dangerous drugs, A. M. A. resolution on, 65
bed capacities, residencies by, 527; 528
bed capacity, internships by, 523; 524; 553
beds authorized in V. A. facilities, statement of A. M. A. before House of Representatives regarding, 191
beds still scarce, United Kingdom, 97
beds, use of, Japan, 2170
Bronx Hospital expands facilities, N. Y., 2030; 2279
charitable, tort liability to patients, [Medicine and the Law] 788
children in, (United Kingdom) 809; 1376—E
Children's of District of Columbia campaign to complete new Research Center, 2277
Children's of East Bay, ground broken for, Calif., 74
coffins, costs, and care, [Medicine at Work] 1891
compulsory assessments and audits by, A. M. A. resolution on, 71
control, internships by type of, 522; 523
control, residencies by type of, 527; 528
data on 400,000 inpatients discharged from 6,000 hospitals, annual report, 1080
dilemma of, nurses' working hours, United Kingdom, 808
disaster plans, yardstick for testing, (Council article) [Lichter & Cousin] *1131
efficiency experts to streamline, United Kingdom, 809
emergency, for Civil Defense, Denver, 2155
employees: corridor consultations or health maintenance? [Felton] *1854
Firmin Desloge, 25th anniversary, Mo., 419
general, epidemic of Shigella sonnei dysentery in, [Ehrenkranz] 1726—ab
general, psychiatric patients in, A. M. A. resolution on, 71
Hahneman, surgical shop donated to Mary Bailey Foundation at, Pa., 1789
having highest autopsy rates, 524
Hill-Burton Survey and Construction program, (recommendations regarding approved) 59; (annual reports on) 1112; 1249
how can electronic data processing equipment be adapted for use in, Texas, 1243
Illinois Eye and Ear Infirmary, centennial of founding, Chicago, 790
infections, "air plates" and control of, 2329
infections, epidemiology, serologic methods for differentiation, [Naumann] 469—ab
insurance and diagnostic services, Canada, 90
insurance, new, and public health, Canada, 1678
Interns; Internships: See Interns and Internship
isolation of patients with staphylococcus infections, 716; (replies) [Rolf; and original consultant] 2208
Jewish Hospital of Saint Louis, research grants for, 909
liability, annual report of Law Department, 1045
mental, Achievement Award of American Psychiatric Association to, Neb., 2278
mental, for Memphis Medical Center, 421
mental, Medfield State Hospital, Mass., 2156
mental patients in, United Kingdom, 2047
Michael Reese, new department of experimental surgery at, Chicago, 1909
military, estimates of costs, 1662
Misericordia General Hospital dedicated, Bronx, N. Y., 2158
Mount Sinai, N. Y., research in experimental pathology, 1241
Navy, new, at Portsmouth, Va., 1671
noise abatement in, United Kingdom, 312
nurseries, familial staphylococcic infections caused by exposure of babies in, [Hurst] 1826—ab
nurseries, premature, salmonellosis unaccompanied by diarrhea, [Watt] 2316—ab
nurseries, prevent staphylococcus infections in, 2204
nursing routine challenged, United Kingdom, 2049
Passavant Memorial, Chicago, (new East Pavilion) 791; (grant for metabolic and renal studies) 1787
personnel, Committee on Health Programs for, annual report, 1067
physician in, and general practitioner change places, Denmark, 706
physicians relation to, A. M. A. resolution on, 68
recommends formation of committees on care of patient, 52
rehabilitation service, factors to be considered in planning, [Wallace & Kottke] *2253
Residents; Residencies: See Residents and Residencies
HOSPITALS—Continued
Saint Elizabeth's, Washington, D. C., new neuropharmacology research center at, 2284
St. Joseph's, grant to Poliomyelitis Respiratory and Rehabilitation Center, Neb., 1141
salmonellosis outbreak in, Denmark, 707
service, A. M. A. Committee annual report on, 1115
spending criticized, United Kingdom, 927
staff, restrictive effect of board certification on medical practice, A. M. A. resolution on, 65
staphylococcal outbreaks, antibiotic-resistant, in medical and surgical ward, [Barber] 945—ab
survey programs, annual report, 1092
tissue committee, uses and abuses of, [Henley & others] *2243
U. S., foreign physicians training in, 1523
U. of Michigan, services at, 909
V. A. neuropsychiatric, proposed at Brecksville, Ohio, 1248
V. A., new neuropsychiatric, dedicated at Topeka, Kansas, (photo) 1248
V. A., personnel changes, 425; 1248
V. A., service-connected disabilities in, A. M. A. resolution on, 67
which for 2 years do not obtain 1/4 of complement of interns may be disapproved for training, 1088
work study in, United Kingdom, 2172
HOUSING
V. A. wheelchair homes, 1915
HUMAN EXPERIMENTATION
action on Nazi camp doctor, United Kingdom, 97
HUMAN FACTORS BRANCH, role of, at Air Force Flight Test Center, [Rowen] *1190
HUMERUS
supracondylar fractures in children, complications and problems of traction treatment, [Staples] *730
HYALASE: See Hyaluronidase
HYALINE MEMBRANE DISEASE
contamination of lungs by fluid of birth canal, studies of rabbits, [Snyder] 120—ab
in lungs of newborn, [Brummelkamp] 123—ab
pulmonary, pathogenesis, [Zunin] 838—ab
HYALITIS
asteroid, incidence of diabetes and hypercholesteremia in, [Smith] *891
HYALURONIDASE
in treatment of strongiloidiasis, (Brazil) 802; [Asfora] 1703—ab
HYAZYME: See Hyaluronidase
HYDELTRA: See Prednisolone
HYDRALAZINE
treated renal hypertension in rats, disease as consequence of increased arterial pressure, [Masson] 2076—ab
treatment (intravenous) in toxemia of late pregnancy, [Johnson] 459—ab
HYDRAMNIOS: See Polyhydramnios
HYDRANENCEPHALY: See Brain
1-HYDRAZINOPHTHALAZINE: See Hydralazine
HYDROCELE
primary, in infancy and childhood, pathogenesis and treatment, [McKay] 1936—ab
HYDROCORTISATE: See Hydrocortisone
HYDROCORTOLE; HYDROCORTONE: See Hydrocortisone
HYDROCORTISONE
intra-articular, United Kingdom, 1927
to prevent complications of endotracheal intubation, [Hamelberg & others] *1959
toxicity, deleterious effect of intra-articular use, [Chandler] 2302—ab
treatment (inhalation) in asthma, [Herxheimer] 2196—ab; (also bronchitis) [Helm] 2197—ab
treatment (local) of tuberculosis in joints and tendon sheaths, [Jørgensen] 713—ab
treatment of asthma, United Kingdom, 1928
treatment of trochanteric syndrome, [Leonard] *175
treatment of tuberculous meningitis, [Cranny] 1284—ab
treatment plus vitamin B_6 in multiple sclerosis, [Reyes Oliveros] 220—ab
HYDROGEN BOMB
exposure and leukemia, United Kingdom, 926
17-HYDROXYCORTICOSTERONE: See Hydrocortisone
HYDROXYDIONE SODIUM SUCCINATE
N. N. D., 285
treatment of delirium tremens, Sweden, 1801
treatment of eclampsia, [Martini] 2069—ab
5-HYDROXYINDOLEACETIC ACID (5HIAA)
in urine in functioning carcinoid, [Sauer & others] *139
HYDROXYPREGNANEDIONE Succinate, Sodium: See Hydroxydione Sodium Succinate
HYDROXYPROGESTERONE
acetate, N.N.D., 181
caproate for functional uterine bleeding, [Zorn] 1274—ab
5-HYDROXYTRYPTAMINE: See Serotonin

HYLAND COMMITTEE
study on Heller Report on organization of A. M. A., amendments to Constitution and Bylaws on, 61
HYPERDIASTASURIA: See Urine, diastase
HYPERLIPEMIA: See Blood lipids
HYPERNEPHROMA
metastases in vagina and vulva, [Overbeck] 338—ab
HYPERSENSITIVITY: See Allergy
HYPERTENSION: See Blood Pressure, High
HYPERTHYROIDISM
[Rose] 945—ab
in children, [Hyde] 1718—ab
in patient 70, treatment, 1835
HYPERURICEMIA: See Blood, uric acid
HYPERVENTILATION: See Respiration
HYPNOSIS
A. M. A. Board report on, 57
fees for anesthesia in, United Kingdom, 2046
International Society for Clinical and Experimental Hypnosis, first annual meeting, 1145
medical use of, (Council reports) 186; 1053
HYPNOTICS: See Sedatives
HYPOGAMMAGLOBULINEMIA: See Gamma Globulin
HYPOPARATHYROIDISM: See Parathyroid
HYPOPHARYNX: See Pharynx
HYPOPHOSPHATASIA: See Phosphatase
HYPOPHYSECTOMY: See Pituitary destruction or excision
HYPOPIGMENTATION: See Pigmentation
HYPOTENSION: See Blood Pressure, low
HYPOTHERMIA, ARTIFICIAL
in thoracic and thoracoabdominal surgery, light cooling with anesthesia in poor risk patients, [Brewer] 1588—ab
moderate, elective cardiac arrest under, [Riberi] 839—ab
of 2 to 12 hours, rewarming after, metabolic effects, [Fisher] 839—ab
removal of tumor from right atrium under, [Krčílková] 2062—ab
HYPOTHYROIDISM: See also Cretinism; Myxedema
congenital, early diagnostic criteria, [Lowrey] 1278—ab
HYPOXIA: See Oxygen deficiency

I

IATROGENIC Disease: See Physicians
IBM MACHINES
A. M. A. annual report, 1083
ICTERUS: See Jaundice
IDENTIFICATION
of hazardous ingredients in chemical products, draft model bill on proper labelling, 1062
of tablets or capsules, means for, 1063
ILEITIS
regional, and pregnancy, 2332
ILEUS: See Intestines obstruction
ILLUSTRATED FILM REVIEWS: See under Moving Pictures, Medical (Reviews)
ILLUSTRATION, medical, award for at San Francisco meeting, 903
ILOTYCIN: See Erythromycin
IMIDAZOLINES: See Tolazoline
IMMIGRANTS
colored, United Kingdom, 2170
Physicians: See Physicians, foreign
IMMUNIZATION
army reduces size and frequency of booster shots, 82
guide in industry, A. M. A. works on, [Medicine at Work] 1898
information for international travel, 914
mass, A. M. A. stand-by program, 1072
schedules, adult, 2328
IMPOTENCE
diabetes and, [Rubin & Babbott] *498
diagnostic sign in Leriche syndrome, relief by endarterectomy, [O'Conor] 1944—ab
IMPREGNATION, Artificial: See Insemination
INCLUSION DISEASE: See Cells
INCOME TAX: See Tax
INCONTINENTIA PIGMENTI: See Pigmentation
INDIANS, AMERICAN
meeting on health of, Neb., 2157
service, reserve officers, A. M. A. Bylaw changes on membership for, 59
INDIGENT: See Medically Indigent
INDUSTRIAL ACCIDENTS
chemical eye injuries, water in emergency treatment of, (Council report) 47
revision of manual on evaluation of injuries, A. M. A. resolution on, 899
INDUSTRIAL DERMATOSES
medicolegal aspects, (Council report) 1351
prolonged and recurrent, (Council report) *516
streptomycin dermatitis in nurses, [Wilson] 465—ab
INDUSTRIAL DISEASES
A. M. A. Committee on Neurological Disorders in Industry, first meeting, 1066
arsine poisoning from cleaning sulfuric acid tanks, United Kingdom, 311
INDUSTRIAL DISEASES—Continued
bronchitis and outdoor occupations, United Kingdom, 2045
carbon tetrachloride poisoning in hairdressers, [Warshaw] 716—C
chronic silo filler's disease, [Schell] 963—ab
deafness from use of earplugs? 1958
diagnosis and proper method of reporting, [Johnstone] *1844
furunculosis in miners, epidemiology, [Ruys] 963—ab
hematuria in boxers, [Kleiman] *1633
man stamps monograms on linen: muscular aches, nervousness, and retrosternal aches from dye? 361
Pneumonoconiosis; Silicosis: See Pneumonoconiosis
subungual hemorrhage in pan washers, [Long] *1226
INDUSTRIAL HEALTH
ad hoc Committee on Medical Services for Construction Projects, new, 1067; (guide) 1901
A. M. A. Committee on Medical Care for Industrial Workers, annual report, 1109
A. M. A. Council annual report, 1065
A. M. A. Joint Committee on Mental Health in Industry, annual report, 1067
A. M. A. works on immunization guide in industry, [Medicine at Work] 1898
cardiac rehabilitation, [Williams] 962—ab
Committee on Industrial Health Emergencies reactivated as Committee on Industrial Health Defense, 1065
diets of occupational groups, United Kingdom, 318
effect of competitive industrial activity on severely disabled cardiac patients, [Slipyan] *147; 190—E
effect of fluorescent light on vision, (Council report) 47
effect of tractor noise on auditory sensitivity of operators, [Lierle] 1721—ab
formaldehyde hazard in workers exposed to it, (replies) [Zavon; and original consultant] 1298
guides to evaluation of permanent impairment to visual system, 414—E; (Committee report) *475
hazards in antibiotic factory, Denmark, 208
health of executives, United Kingdom, 1153
Heart-in-Industry conference, Chicago, 1381
"hire the handicapped—it's good business," [Medicine at Work] 1368
hospital employees, corridor consultations or health maintenance? [Felton] *1854
medical considerations of exposure to microwaves, [Barron & Baraff] *1194
medicine, compensations to physician in, [Belknap] *1847
mobile units in, [Medicine at Work] 1898
myocardial infarction rate by occupational group, [Biorck] 841—ab
new concepts of coronary heart disease after surgery, [Beck & others] *2110
noise: is it a health problem? [Glorig & Summerfield] *370
old age and work, condition of limbs related to capacity for work, Denmark, 208
physician as advisor to management, [Keene] *1851
problem back, [Kirkpatrick] *1864
problems of directors, United Kingdom, 2048
silica exposure after tuberculosis, 2330
study of men who returned to work after myocardial infarction, [Weiss & Weiss] *17
troubled employee; economic loss, community problem, medical challenge, (Medicine at Work) [Golin] 1371; 1377—E
workers' absenteeism due to illness and injury, preliminary guide for measuring, (Council reports) 904; 1066; 1112; 1230
workers' absenteeism, medical certification for, 1019—E
workers' absenteeism, PHS recommended influenza vaccination among certain groups, 82; 798
workers' absenteeism, relation to private practice, abstracts on, 903; 1019—E; 1133
INDUSTRIAL HYGIENE
eye safety equipment, (Council report) 47
INDUSTRIAL MEDICINE: See Industrial Health
INDUSTRIAL TRADE UNIONS: See also United Mine Workers of America
A. M. A. guides for evaluating management and union health centers, annual report, 1066; 1111
A. M. A. meets with 10 "third party" medical chiefs, [Medicine at Work] 1366
health and insurance plans under collective bargaining, summary report, 1663
medicine meets with labor, report of conference, 289—E; 290
1958 survey of union health centers, (Council reports) 904; 1066; 1112; 1234
third parties in medicine; union, management, and consumer sponsored medical service plans, (President's page) 416
INFANTS
antipyretic effectiveness and toxicity of aspirin and salicylamide in, (replies) [Woodbury] 1259—C; [Bass] 1684—C
cold babies, United Kingdom, 97
coliform organisms in epidemic diarrhea in, Canada, 1677
Coxsackie infection serious in, [Hosier] 1941—ab
croup in, isolate cytopathogenic agent resembling CA virus from, [Crambett] 461—ab
cystic kidney disease in, [Hooper] 466—ab
diabetic coma in, United Kingdom, 311
diarrhea in, neomycin-sulfadimidin for, India, 1256
electrocardiogram of, India, 921
11 months old, flattening of one side of head in, treatment, 135
Escherichia coli enteritis in, [Tsimbler] 342—ab
examination for muscle weakness in, [Johnson] *1306
feeding, omit milk and galactose-containing food for hereditary galactose disease, (Council report) [Guest] *2015
feeding, Vanderbilt study of maternal and infant nutrition, (Council article) [McGanity & others] *2138
glycogen storage disease of heart in, [Friedman] 221—ab
head, transillumination, demonstrate by hydranencephaly, [Griffiths] 1713—ab
hemangiomas in, conservative treatment, [Blackfield] 1716—ab
hydroceles in, primary, pathogenesis and treatment, [McKay] 1936—ab
inguinal hernias in, early surgery for, [Kiesewetter] 1711—ab
leukemia in, due to irradiation of mother during pregnancy, United Kingdom, 314
methemoglobinemia in, United Kingdom, 709
Mortality: See also Fetus, death of; Stillbirth
mortality after use of promethazine in obstetrics, [Carroll & Moir] *2218
mortality and morbidity study, conference on, (Council report) 1554
perforating peptic ulcer in, [Grasveld] 218—ab
plasma-cell pneumonia in, etiology, [Moser] 1413—ab
pneumonia with abscess formation in, therapy, [Bucha] 222—ab
poliomyelitis antibodies diaplacentally transmitted in, persistence of, [Müller] 341—ab
poliomyelitis antibodies in, before and after vaccination, [Buser] 220—ab
postpneumonic lung abscess in, lobectomy for, [Moore] 2308—ab
premature and weak, meningeal hemorrhages of, [Giraud] 1719—ab
premature, BCG vaccination of, [Eckardt] 122—ab
premature, kernicterus in, with low bilirubin in plasma, [Harris] 461—ab
premature, relationship of Little's disease to, [Churchill] 831—ab
premature, salmonellosis in nursery unaccompanied by diarrhea, [Watt] 2216—ab
respiratory infections, acute, in, treatment, [Nisbet] 2317—ab
response to poliomyelitis vaccine given during pregnancy, [Martins da Silva & others] *1
serological response to poliomyelitis vaccine, [Perkins] 1164—ab
staphylococcal infection in mothers and, [Monro] 1275—ab
staphylococic pneumonia in, [Hendren & Haggerty] *6; (cortisone for) [Bühler] 222—ab
sudden death, United Kingdom, 925
INFANTS, NEWBORN: See also Fetus
birth weights, optimal, New York city comments on U. S. Government study, [Baumgartner] 1154—C
evaluation of, [Apgar & others] *1985
Hemolytic Disease of (Erythroblastosis): See Hemolytic Disease
hernia of diaphragm in, [Neimeier] 1817—ab
hyaline membranes in lungs of, [Brummelkamp] 123—ab
incidence of conjunctivitis after silver nitrate and oxytetracycline in, [Mathieu] 121—ab
jaundice in, serum transaminase in differential diagnosis of, [Kove & others] *860
Mortality: See Fetus, death of; Infants, mortality; Stillbirth
mycoses of, etiology; vaginitis, [Bret] 458—ab
narcotic withdrawal symptoms in, [Kunstadter & others] *1008
perforation of stomach in, [Castleton] 111—ab
perinatal study project and exhibit, annual report, 1108
Premature: See Infants, premature
pulmonary pathology in, [Briggs] 460—ab
rupture of normal spleen in, during delivery; [Hottinger] 461—ab
septicemia in, [Nyhan] 1716—ab
tetanus in, (Denmark) 706; (Brazil) 2167
tetany in, especially in babies of diabetic mothers, [Craig] 1717—ab

INFANTS, NEWBORN—Continued
thrombocytopenia in, India, 1798
varicella with isolation of virus in, [Ehrlich] 1277—ab
INFECTION: See also specific organ or region, as Respiratory Tract; and specific agent as Staphylococcus
chronic, recurrent night sweats, diagnosis, treatment, 843; (replies) [Robinson; Weinberg] 2208
control, factors in decline of maternal mortality, [Klein & Clahr] *237
hospital, "air plates" and control of, 2329
hospital, epidemiology, serologic methods for differentiation, [Naumann] 469—ab
in 4 siblings, lymphoid leukemia developed in one, [Tudor] 930—C
neonatal, and vaginitis, mycoses of newborn, [Bret] 458—ab
septic, leukocyte sedimentation rate in, [Lusvarghi] 2200—ab
septic shock, nature and treatment, [Altemeier] 2198—ab
surgical, control, [Hitchcock] 2066—ab
surgical, wound, United Kingdom, 925
treatment, dihydrostreptomycin plus penicillin, Sweden, 807
INFERTILITY: See Sterility
INFLUENZA
Asian, A. M. A., program, annual report on, 1051; 1071
Asian, effects on cardiovascular system, [Walsh] 1809—ab
Asian, encephalitis caused by, [Furtado] 1409—ab
Asian, Far East strain, [De Maeyer] 104—ab
Asian, (Israel) 94; (Belgium) 307; (United Kingdom) 1396; (Netherlands) 2044
Asian, neurologic disorders after, [Horner] 118—ab; [McConkey] 954—ab
Asian, psychosis after, Israel 2044
Asian, pulmonary complications, eventually lethal, treatment, [Moeschlin] 1158—ab
Asian, spontaneous pneumothorax in, [Welsh] 1698—ab
Asian, vaccine, intradermal injection; polyneuritis after, (replies) [Steigman; and original consultant] 2086
Asian, virus vaccine, monovalent, type A, N. N. D., 182
complications: fulminating pneumonias, [Buechner] 105—ab
epidemic, [Laha] 1577—ab
epidemic, importance of Staphylococcus aureus in pneumonia in, [Robertson] 1585—ab
epidemic in Canada in 1957, 1923
immunization effects on epidemic of respiratory illness in children, [Glazier] 460—ab
1918 epidemic, compared to Asian influenza epidemic, 2332
on Okinawa and Oregon, 1563
sickness claims and, United Kingdom, 435
vaccination, (Committee announcement) 1234
vaccination, PHS recommended for certain groups, (Asian type) 82; 798
vaccine, United Kingdom, 2170
virus infection, severe effects, [Forbes] 1265—ab
INH: See Isoniazid
INHALATION
of gasoline fumes, urge in boy 5, treatment, 981
of mercury vapor, acute poisoning from, [Matthes] 2317—ab
therapy with hydrocortisone in asthma, [Herxheimer] 2196—ab; (and bronchitis) [Helm] 2197—ab
INJECTION
abscess due to Candida albicans, [Eriksen] 837—ab
forcible blood and fluid into arteries in terminal states, [Radushkevich] 1711—ab
gasserian, alcohol for relief of tic douloureux, [Ecker] 119—ab
intra-articular hydrocortisone, United Kingdom, 1927; (deleterious effects) [Chandler] 2302—ab
intramuscular digoxin, [Fletcher] 437—ab
intraosseous anesthesia in operations on extremities, [Okhotsky] 1825—ab
intravenous diphtheria antiserum, importance of, [Tasman] 712—ab
intravenous infusions, failure, 1733
parenteral digitalis, 6 preparations compared, [Aravanis] 347—ab
radioactive phosphorus intravenously, intra-arterially and intracardially for lung cancer, [Ariel] 350—ab
INSANITY: See Mental Disorders; Schizophrenic Reactions; Medicolegal Abstracts at end of letter M
INSECTICIDES
blood cholinesterase and myasthenia gravis after exposure to, (replies) [Trimble; and original consultant] 138
organic phosphate poisoning, histochemical proof of, [Petty] 2199—ab
vaporizing devices for, present status, 1061
INSECTS
bites, edema from, prevention, treatment, 360
stings, treatment, 1954
INSEMINATION, ARTIFICIAL
sterility and infertility, [Cohen] *1963
INSTITUTE: See also Societies and Other Organizations at end of letter S
Saskatchewan Cancer and Medical Research, formally opened, 1914
INSTRUMENTS
bandage scissors, new, [Burnham] *760
new, for cold conization, [Fleming] *886
INSULIN
in plasma, estimation, India, 2168
"insulitis" in early juvenile diabetes, [LeCompte] 2199—ab
murder by, United Kingdom, 811
producing capacity of pancreas of children with diabetes, [Klein] 1718—ab
INSURANCE: See also Medical Service plans
abuses, annual report, 1116
A. M. A. Committees, annual reports on, 1115; 1116
A. M. A. meets with 10 "third party" medical chiefs, [Medicine at Work] 1366
company, ethical to disclose case history to? (Judicial Council opinion on) 1556
federal contribution act, state participation in, A. M. A. resolution on, 64
fees, oldsters, A. M. A. meeting report, 2148
health, claim forms, annual report, 1116
health plans under collective bargaining, 1663
health, pre-retirement financing or "paid-up," annual report, 1116
health, United Kingdom, 2171
health, voluntary, annual report, 1115
health, voluntary, experiments to provide for retired persons, (Bureau article) [Polner] *194
health, voluntary, for aged, A. M. A. resolutions on, 65; 68
health, voluntary, in Great Britain, surprising growth of, [Follmann] *1641
hospital, and diagnostic services, Canada, 90
life, reasons why people bought, annual report, 1081
major changes made in reference to, 1100
malpractice, contract, [Hassard] *2117
old age and survivors program, A. M. A. resolution on, 67
plan and public health, Canada, 1678
research co-sponsored by Insurance Company of North America, 190—E
sickness, claims and influenza, United Kingdom, 435
V. A. cases, new action, (Council article) 905
what should a doctor carry? [Business Practice] 1691
INTELLIGENCE, hypophysectomy effects on, [Schon] 2310—ab
INTERFERON
virus growing in tissue culture prevents unrelated viruses from growing, United Kingdom, 312
INTERNAL MEDICINE
neurosis and, Portugal, 211
training of internists and, (Miscellany) [Rhoads] *1398
INTERNATIONAL: See also list of Societies at end of letter S
conference on peaceful uses of atomic energy, WHO report, 929
educational exchange in medicine, 1522; 1549—E
film festivals, committee to determine U. S. policy of participation in, 1075
Ladies' Garment Workers' Union conference with physicians and other labor leaders, 289—E; 290
Medical Film Exhibition, Ralph Creer attends Japan Medical Congress to organize and direct, 695
Medical Year, A. M. A. support for proposed, resolution on, 2150
symposium on physics and medicine of atmosphere and space, 797; [Medicine at Work] 1369
travel, immunization information for, 914
INTERNS AND INTERNSHIP
annual report and directory, Oct. 4, 521; (approved internships) 529; 694—E
approved, report, 58
Army program, 1536
civilian and military internships, Air Force sponsored, 1541
Council annual report on, 1092
draft status of interns, 1534
first year interns, senior students as clinical clerks to replace, (A. M. A. resolution on) 65; (report) 1088
hospital which for 2 years does not obtain ¼ complement of interns may be disapproved for training, 1088
internship aspects of medical education, 1476
Internship Review Committee, 526
internships by type of service, 522; 555
National Intern Matching Program, 525; 1092
Naval internships, 1539
new program at U. of Washington, 296
INTERNS AND INTERNSHIP—Continued
no single panacea for internship, problem of shortage, (guest editorial) [McKittrick] 693—E; (reply) [Koning] 1893—C
shortage of interns, A. M. A. resolutions on, 67
two-year rotating internship, (A. M. A. resolution on) 67; (report) 1087
U. of Michigan exchange program, 791
INTESTINES
acetylcholine content of, India, 1925
carcinoid, primary functioning, diagnosis and management, [Sauer & others] *139
diverticulitis, complicated, surgical management, [Coicock] 2065—ab
helminthic infection, India, 1680
inflammation, acute necrotizing (pseudomembranous) enterocolitis, [Kay] 1708—ab
inflammation, chronic regional enteritis, 126 cases, [Jackson] 445—ab
inflammation, E. coli enteritis, [Balaban] 341—ab; (in nurslings) [Taimbier] 342—ab
inflammation, regional enteritis, (clinical aspects and diagnosis) [Daffner] (treatment) [Brown] 2060—ab; (protein absorption) 2205
inflammation, staphylococcic enteritis and antibiotics, Sweden, 1395
large, papilloma of, [Goldgraber] 967—ab
lipodystrophy, systemic involvement; cytologic observations, [Sieracki] 2199—ab
obstruction, gallstone ileus, [Rijken] 953—ab
obstruction, hepatodiaphragmatic interposition of jejunum, ileum, cecum and ascending colon with, [Aiken] 340—ab
obstruction, surgical ascariasis in children, [Fernando] 1407—ab
protozoa and helminths, acquisition by children in Egypt, [Kuntz] 1282—ab
tumors causing intussusception, India, 1393
INTRINSIC FACTOR
inhibiting substance in serum after oral treatment of pernicious anemia, [Schwartz] 943—ab
treatment plus vitamin B_{12} in Biermer's disease, [Croizat] 1580—ab
INTUSSUSCEPTION
tumors of intestine causing, India, 1393
INVALIDISM
Greenland's, Denmark, 920
INVENOL (carbutamide): See Sulfonylureas
IODINE
acne and, 2333
132, applications, WHO report, 1397
radioactive, for angina pectoris, [Segal] 346—ab
radioactive, test, corticosteroids effects on, 1734
radioactive, test, what factors may influence, 1731
IPRONIAZID
phosphate, N. N. D., 286
toxicity, 50—E; (reply) [Robie] 1802—C
toxicity: jaundice, pathological findings, [Popper] *2235
treatment of angina pectoris, (Switzerland) 1572; [Casellas Bernat] 1946—ab; [Master] 2324—ab
IRON
biliary excretion before and after intravenous iron in chronic liver disease, [Bertolini] 840—ab
deficiency anemia in pregnancy, prophylaxis, [Kerr] 1939—ab
ferrous succinate for hypochromic anemia, India, 1151
galvanized container, punch in poisonous, Calif., 790
idiopathic pulmonary hemosiderosis, [Espinoza] 340—ab
intolerance to, United Kingdom, 924
medullary, in rheumatic fever in children, [Bernheim] 1715—ab
miners, pneumoconiosis in, [Even] 1720—ab
preparations, cost of, United Kingdom, 1574
radiologic sign in hemosiderosis, [Shanbrom & Zheutlin] *33
"scrap iron" intoxication, [Gadsden & others] *1220
ISCHIUM
removal, complication: perineal urethral diverticulum, [Comarr & Bors] *2000
ISOLATION
of patients with staphylococcus infections, 716; (replies) [Rolf; and original consultant] 2208
stress in medical and mental illness, [Ziskind] *1427
ISONIAZID
mycobacteria from untreated cases of primary tuberculosis of lung, sensitivity to, [Spina] 1945—ab
toxicity, pyridoxine to prevent, [Rosa] *273; (reply) [Middlebrook] 1685—C
treatment, early results in relation to serum isoniazid level, [Vivien] 325—ab
treatment of tuberculous meningitis with Neoteben, results, [Gehrt] 1945—ab
treatment plus PAS and streptomycin in urogenital tuberculosis, [Hansson] 1720—ab

ISONIAZID—Continued
treatment plus streptomycin in tuberculosis meningitis, [Giova] 440—ab
ISONICOTINIC ACID HYDRAZIDES: See Iproniazid; Isoniazid
ISOPROPYL ALCOHOL
"scrap iron" intoxication, [Gadsden & others] *1220
ISOPROTERENOL (isopropylarterenol)
intravenously with cardiac pacemaker for asystole complicating acute myocardial infarction, [Solarz & others] *2124
ISOTOPES
Radioactive: See Radioactive isotopes; and under specific elements as Iodine
ISUPREL: See Isoproterenol
ITCHING
of tongue, treatment, 1423
signs and symptoms in chronic renal failure, [Effersøe] 214—ab
ITURINE, Belgium, 2290

J

J. A. M. A.: See American Medical Association Journal
JAPAN
Medical Congress, (Ralph Creer to organize and direct international film exhibition) 695; (report) 1073
JAUNDICE
Epidemic: See Hepatitis, Infectious
etiology: chlorpromazine; clinical course, hepatic function, pathology, [Gebhart] 107—ab
etiology: chlorpromazine, Israel, 2044
etiology: iproniazid, 50—E; (reply) [Robie] 1802—C; (pathologic findings) [Popper] *2235
hazards of therapeutics, [McHardy] *1868
icterus gravis neonaturm, colisepsis as cause of, [Pielage] 833—ab
in newborn, differential diagnosis, serum transaminase in, [Kove & others] *860
JAWS
tumors, osteogenic sarcoma, [Kragh] 2304—ab
unilateral temporomandibular joint pain, diagnosis and treatment, 472
JEJUNUM
interposition operation, 33 cases, [Thomas & Merendino] *1759
JENKINS-KEOGH BILLS
A. M. A. annual reports, 1047; 1080
A. M. A. resolutions endorsing principles of, 66
JEWELRY
gems and precious stones, [Leisure Corner] 1261
JEWS
Oriental, hemolytic trait in, Israel, 94
Sephardic, blood groups in, Israel, 94
JOINT
Commission on Accreditation of Hospitals, (automatic stop order on dangerous drugs; restrictive effect of board certification, A. M. A. resolutions on) 65; (standards and requirements, A. M. A. resolution on) 68; (resolution on Section on Obstetrics and Gynecology representation on) 898; (A. M. A. report on) 1092
Commission on Mental Illness and Health, annual report on, 1053
Committee on Health Problems in Education, annual report on, 1080
Committee on Medical Education for National Defense: See under Education, Medical
Committee on Mental Health in Industry of A. M. A., troubled employee, (Medicine at Work) [Golin] 1371; 1377—E
Conference Committee, A. M. A. and American Hospital Association recommend hospitals set up, 1233
Council to Improve Health Care of Aged, (A. M. A. resolutions on) 65; 68; (report) 1102
National Commission for Improvement of Care of Patient, (recommends individual hospitals form committees) 52; (report) [Medicine at Work] 1894
JOINTS
lumbosacral, transfixing, 2331
osteoarticular lesions in smallpox, India, 1255
subtalar, extra-articular arthrodesis of, for cerebral palsy, [Baker & Dodelin] *1005
tuberculosis activated by local hydrocortisate, [Jørgensen] 713—ab
JOURNALS
A. M. A. magazine relations, annual report, 1050
American Medical Writers' Association honor awards in medical journalism, 1562
Armed Forces medical publications, Col. Benford named director, 1247
California GP, article reprinted from, (Miscellany) 931
Civil Defense Review, publication of, 1072
JOURNALS—Continued
Drug Standards, monographs of tests and assays for new and nonofficial drugs published in, 41; 185; 1012
Journal of the A. M. A.: See American Medical Association
medical, advertising in, A. M. A. resolution on, 69
pharmacology, three new ones, 1245
Society for Investigative Dermatology dedicated issue to Dr. Rothman, Chicago, 418
JURISPRUDENCE, MEDICAL: See Medical Jurisprudence

K

KANAMYCIN
new antibiotic, misuse of, [Mann] 814—C
KANTREX: See Kanamycin
KELOIDS
treatment, oral, [Kelly] 2073—ab.
KERATITIS
interstitial, nonsyphilitic, and bilateral deafness (Cogan's syndrome) with cardiovascular disease, [Eisenstein] 108—ab
KERNICTERUS
in premature infants associated with low bilirubin level in plasma, [Harris] 461—ab
17-KETOSTEROIDS
urinary excretion in leishmaniasis, India, 209
KIDNEYS
artificial, in control of accidental poisoning, [Cann & others] *717
artificial, Kolff twin coil, [Holmes] 1414—ab
biopsy, France, 1797
biopsy specimens from patients with hypertension; histology, [Sommers] 970—ab
calculi (calcium), excretion of calcium and inorganic phosphate in, [Hodgkinson] 1820—ab
calculi complicating rehabilitation of respirator patient, [Neu] *1610
cystic disease in infants, [Hooper] 466—ab
disease, chronic, in children; correlate clinical findings with morphology, [Vernier] 1942—ab
disease, low-sodium diets in, (Council report) [Danowski] *1886
disease, nephrectomy in juvenile hypertension with, [Welch] 463—ab
disease, nephrolithiasis in children, diagnosis, [Diligenskaya] 341—ab
disease (nephrosis) in children and adults, prolonged intermittent steroid therapy for, [Lange & others] *377
disease (nephrotic syndrome) complicating mercurial diuretic therapy, [Riddle] 126—ab
disease (nephrotic syndrome) in man 38, treatment, 1956
disease (nephrotic syndrome, reversible) with congestive heart failure, [Burack] 2298—ab
foreign bodies in, needle within calyces, [Naulleau] 344—ab
function in patients recuperated from severe hypertension with treatment, [Caeiro] 819—ab
function, preserve during partial nephrectomy, rubber band tourniquet for hemostasis, [Goodwin & Thelen] *179
function test in leprosy, India, 1797
function tests abnormal in Coxsackie B virus infection, [Utz & Shelokov] *264
Goldblatt, nephrogenic hypertension after operative trauma to renal artery, [McDonald] 451—ab
Inflammation: See Nephritis
insufficiency (acute failure) and generalized pain, (Diagnostic Problems) [Kushner & Szanto] *1778
insufficiency (acute failure), atypical heat stroke with, [Baxter] 109—ab
insufficiency after delivery, prognosis, [Thaysen] 1275—ab
insufficiency (chronic failure), signs and symptoms, [Effersøe] 214—ab
nephrogenous polycythemia, [Forssell] 1821—ab
papillary necrosis, [Hultengren] 961—ab
papillary necrosis, roentgen diagnosis and formation of calculi, [Lagergren] 130—ab
primary renal hypokalemia vs. primary aldosteronism, [Aisted] 1578—ab
renal hypertension as consequence of increased arterial pressure, study in rats, [Masson] 2076—ab
rupture, management of severely injured patient, [Schulte] *2094
surgery, subcapsular nephrectomy, [Kittredge & Fridge] *758
transplantation between 7 pairs of identical twins, [Murray] 2190—ab
KLINEFELTER SYNDROME
chromatin-positive, true; relation to feeblemindedness, [Prader] 2103—ab
KNEE
arthrosis of, Sweden, 2294
compression in arthrodesis, comparative methods of fusion, [Stewart] 328—ab
KOPLIK, HENRY (1858-1927)
centennial exhibit, N. Y., 1911
KRAUROSIS
leukoplakia syndrome, vulvar, topical androgens for, [Richardson] 2312—ab
KRUSEN, FRANK HAMMOND, A. M. A. Distinguished Service award to, 53
KWASHIORKOR
dried skimmed milks and, [Pretorius] 223—ab
4 cases from Louisiana, [Henington] 1277—ab
KYASANUR Forest disease, India, 804
KYNEX: See Sulfamethoxypyridazine
Acetyl: See Acetyl Sulfamethoxypyridazine
KYPHOSCOLIOSIS: See Spine curvature

L

LSD: See *d*-Lysergic Acid Diethylamide
LABELS
of chemical products, draft model bill to require warning of hazardous ingredients, 1062
LABOR
acute renal insufficiency originated after, prognosis, [Thaysen] 1275—ab
after previous cesarean section, India, 2042
cesarean section for cephalopelvic disproportion after previo... vaginal deliveries, [Davila] 2069—ab
midline episiotomy, Brazil, 88
premature, associated with malaria, United Kingdom, 1927
premature, USPHS grant for study of, Pa., 701
promethazine in, 2½ year survey, [Carroll & Moir] *2218
pulmonary hyaline membrane contamination of lungs by fluid of birth canal, studies in rabbits, [Snyder] 120—ab
rupture of normal spleen in infant during, [Hottinger] 461—ab
type of, evaluation of newborn infant, [Apgar & others] *1985
LABOR (industrial): See Industrial Accidents; Industrial Diseases; etc.
LACERATIONS
in boxers, relation to renal injury, [Kleiman] *1633
LACRIMATION
tear gas exposure, treatment, 1167
LACTATION
deodorants relation to supply of milk, 1297
precordial murmurs during, [Hurst] 1939—ab
Vanderbilt study of maternal and infant nutrition, (Council article) [McGanity & others] *2138
LACTIC ACID
bacilli in cow's milk, source of, 981
LAL, GOBIND BEHARI A. M. A. distinguished service citation to, 53
LAMBLIASIS: See Giardiasis
LAPAROSCOPY
value in ascitic syndromes presenting diagnostic difficulties, [Girard] 2189—ab
LAPAROTOMY: See Abdomen surgery
LARGACTIL: See Chlorpromazine
LARVA MIGRANS
ancylostomiasis braziliensis, [van Zeben] 833—ab
LARYNGITIS
functional, 1733
LARYNX
minor sequelae after endotracheal intubation, [Wolfson] 1417—ab
obstruction, prednisone treatment, India, 707
stridor in rheumatoid arthritis, [Darke] 123—ab
LATEX
fixation test, slide, in diagnosis of rheumatoid arthritis, [Singer & Plotz] *180
LAWS AND LEGISLATION
activities of Woman's Auxiliary, 1048
A. M. A. Committee annual report, 1046
draft model bill requiring identification of hazardous ingredients on chemical labels, 1062
federal, A. M. A. statement regarding appropriation for military dependents before Senate committee, 1551
federal, compliance with Miller Pesticide Amendment to FDA Act, 1061
federal, current legislation on medical care to indigent, annual report, 1106
federal, legislative developments in veterans' affairs, annual report, 1105
federal, second session, 85th Congress, annual report, 1047
federal, state participation in insurance contribution act, A. M. A. resolution on, 64
federal, V. A. insurance cases, new action, (Council article) 905
federal, Washington Office annual report, 1048
federal, Washington Office summary, 780; 1124
Forand Bill: See Forand Bill
Jenkins-Keogh Bills: See Jenkins-Keogh Bills
medical care for indigent in 1958, (Council report) 2151

LAWS AND LEGISLATION—Continued
Social Security: See Social Security
state legislative keyman organization, annual report, 1048
LAWYERS: See Attorneys
LAXATIVES: See Cathartics
LEAD
poisoning, edathamil calcium-disodium for, [Cann & others] *717
LECITHIN
in diet, can one use too much? 1168
LECTURES
Albany Medical College, annual honorary lectureship award, 1241
American College of Preventive Medicine, 911
Biddle (Andrew P.), Mich., 74
Brodel Memorial, 702
Brown (Aaron), N. Y., 1382
Brown (George Elgie) Memorial, 420; 912
Caldwell, 422
Conner (Lewis A.) Memorial, 912
Craig (Charles F.), 1244
Danforth (Murray S.) Oration, R. I., 1243
Friedenwald Memorial, Md., 1381
Gregg (Alan), first, 201
Harrington, N. Y., 1559
Heron (Ivan C.), Calif., 418
International College of Surgeons' third series, Chicago, 1787
Jackson Memorial, 702; (ocular toxoplasmosis) [Hogan] 2322—ab
James (William) Lectures, Mass., 1381
Judd-Plummer Memorial, Minn., 1788
Memorial Fund Lecture, [Osserman] 1585—ab
Mueller (J. Howard) Memorial, Mass., 2029
New York Academy of Medicine, lectures for laity, 1382
North Shore Hospital series on "Emotional Forces in the Family," Ill., 418; 1139; 2156
Phemister (Dallas B.), Ill., 699
Phi Delta Epsilon Fraternity, (Cincinnati; Cleveland) 1242; (Ind.) 2156
Pincoffs (Maurice C.), second lecture in internal medicine, Md., 1666
Reiss (Herman L.) Memorial, N. Y., 793; 1141
Sacramento County Hospital, Volunteer Medical Staff, second annual lecture honoring, Calif., 1665
Schoenberg Memorial, N. Y., 1789
Silverman (Hilda Freeman), N. Y., 1788
Squibb Centennial Lectures, (Chicago) 1381; (first) 2033
Stieglitz (Edward Julius) Memorial, first, Pa., 1789
Strauss (Alfred A.), Wash., 296
Truman (Stanley R.), Calif., 417
Tulane U. Lectureship in Social Psychiatry, 2029
Virchow (Rudolph) centennial, 798
Wadsworth (Augustus B.), N. Y., 792; 1382
Webster (James R.) Memorial, 1563
Wechsler (Israel S.), N. Y., 1911
Wherry Memorial, 702
Williams (Linsly R.) Memorial, N. Y., 1382
Wyckoff (John), N. Y., 1241
Wyeth Lectureship, 1561
LEDERBERG, JOSHUA, Nobel prize to, 1915; 2159
LEGAL MEDICINE: See Medical Jurisprudence
LEGISLATION: See Laws and Legislation
LEGS: See also Extremities
chronic ulcers, and tetanus, [Ris] 1700—ab
LEIOMYOSARCOMA
of stomach, [Mason] 2183—ab
LEISHMANIASIS
blood proteins in, India, 433
Leishmania donovani, tissue culture, Canada, 2291
splenectomy for, India, 1798
urine 17-ketosteroids in, India, 209
LEISURE CORNER: See Physicians, avocations
LENS, CRYSTALLINE
acrylic lens operation, 1838
Retrolental Fibroplasia: See Retrolental Fibroplasia
LENTICULAR NUCLEUS
globus pallidus, experience with chemopallidectomy, [Paxton & Dow] *755
hepatolenticular degeneration, biochemical disturbances, [Enger] 2061—ab
LEPROSY
kidney function test in, India, 1797
prevention, BCG vaccine for, Brazil, 1677
LEPTOCYTOSIS
familial, and erythremic myelosis, [Olshin] 1281—ab
LERICHE SYNDROME
aortic thrombosis, [Starer] 214—ab
impotence, early diagnostic sign, mechanism; endarterectomy for, [O'Conor] 1944—ab
LERITINE: See Anileridine
LEUKEMIA
acute, in adult, effect of 6-mercaptopurine in, [Kenis] 347—ab
acute, in adults, prednisone and prednisolone for, [Granville] 1286—ab
acute, metacortandracin for, [Picard] 1264—ab
acute, treatment, France, 209
LEUKEMIA—Continued
etiology, toxic agent in, [Scheuer-Karpin] 1265—ab
genetic background for, 137
H-bomb exposure and, United Kingdom, 926
in children, evolution in course of treatment, [Chaptal] 960—ab
in infant due to radiation in mother during pregnancy, United Kingdom, 314
lymphoid, developed in child after infection, [Tudor] 930—C
radiation-induced, factor in thymus predisposes mice to, United Kingdom, 312
research grants in, 1561
treatment, 6-chloropurine, [Ellison] 1584—ab
LEUKOCYTES
count, leukopenia complicating staphylococcic endocarditis treated with ristocetin, [Weber] *1346
morphology, polymorphonuclear, reliability in determining genetic sex, [Cooper] 831—ab
sedimentation rate in lymphosarcoma, reticulosarcoma and malignant lymphogranuloma, [Bellesia] 2075—ab
sedimentation rate in tuberculosis and septic infections, [Lusvarghi] 2200—ab
LEUKOPLAKIA
kraurosis syndrome, vulvar, topical androgens for, [Richardson] 2312—ab
LEVULOSE: See Fructose
LIABILITY: See Malpractice
LIBEL AND SLANDER: See Medicolegal Abstracts at end of letter M
LIBRARY
A. M. A. Library, annual report, 1042
National Library of Medicine, plans for new building, 2280
of Council of Royal Society of Medicine, Rockefeller Foundation grant for, United Kingdom, 2296
LICENSURE
Annual Congress on: See American Medical Association
annual report of Law Department, 1045
by reciprocity, (A. M. A. resolution on) 71; (report) 1088
central repository of medical credentials, annual report on, 1070
of American graduates of foreign medical schools, 1524
of naturopaths, etc., A. M. A. activities in case of convicted psychiatrist, Dr. Reddick, who issued licenses, 1064
of paramedical groups, report, 2149
LIDOCAINE HYDROCHLORIDE
as spinal anesthetic, pharmacology, [Featherstone] *1327
LIFE
expectancy after splenectomy, 1837
expectancy among radiologists, United Kingdom, 311
expectancy 20 years longer, 80
LIGHTING
fluorescent, effect on vision, (Council report) 47
fluorescent tube, proptosis after explosion of, 1295
von LINNÉ, KARL (1707-1778)
autobiographies, Sweden, 1800
LIPIDS: See Blood lipids
LIPODYSTROPHY
intestinal, Whipple's disease, systemic involvement; cytology, [Sieracki] 2199—ab
LIPOMA
of colon, [Henderson] 131—ab
LIPOPOLYSACCHARIDES
bacterial, highly purified (Pyrexal), for inflammation of adnexa, [Fricke] 1273—ab
LIPOPROTEINS
protein moieties, characterization of, U. of Florida to study, 790
LIQUAEMIN: See Heparin
LISTERIOSIS
in mother and child, [Kranendonk] 1275—ab
LITTLE'S DISEASE: See Paralysis, cerebral
LIVER
biopsy (needle), postbiopsy mortality in metastatic neoplasm, [Fisher] 1811—ab
cirrhosis, ammonia intoxication in, after chlorothiazide, [Magid & others] *35
cirrhosis (biliary) and ulcerative colitis, treatment, 1297
cirrhosis, coma produced by carbonic anhydrase inhibitors in, [Rissel] 2301—ab
cirrhosis, packed erythrocyte transfusions for, India, 1150
cirrhosis, pleural manifestations in, France, 92
cirrhosis (portal), heart disease in patients dying of, [Lunseth] 2180—ab
cirrhosis, pruritus complicating, treatment, 1297
cirrhosis, serum proteins in, India, 1151
cirrhosis with ascites, low-sodium diets in, (Council report) [Danowski] *1886
coma in surgical patients, diagnosis and management, [Najarian] 950—ab
coma, massive doses of cortisone in, [Pressar] 324—ab
LIVER—Continued
disease and spider nevi, India, 1925
disease, blood ammonia in, [Li] 1578—ab
disease (chronic), biliary excretion of copper and iron before and after intravenous use of the metals in, [Bertolini] 840—ab
disease, clinical significance of serum cyanocobalamin in, [Rachmilewitz] 106—ab
disease, diagnostic value of serum-transaminase in, [Pryse-Davies] 443—ab
disease, hepatosplenomegaly in children, Brazil, 1254
function tests and oral cholecystography, correlation, 2082
function tests in chlorpromazine jaundice, [Gebhart] 107—ab
function tests, India, 1257
glycogenesis, effects of corticosteroids upon, [Fodden] 969—ab
hepatodiaphragmatic interposition of jejunum, ileum, cecum and ascending colon with intestinal obstruction, [Aiken] 340—ab
Hepatolenticular Degeneration: See Lenticular Nucleus
Inflammation: See Hepatitis, Infectious
insufficiency and coma, electroencephalographic abnormalities in, [Bogacz] 456—ab
insufficiency, neuropsychiatric symptoms in, [Harvaid] 216—ab
metastases, differential diagnosis, Austria, 1797
necrosis, subacute, and postnecrotic cirrhosis due to anicteric viral hepatitis, [Klatskin] 1811—ab
pathological findings in jaundice after iproniazid, [Popper] *2235
precirrhosis, its clinical entity, [Aron] 1404—ab
toxic effects of alcohol on, serum transaminase activity in alcoholism, [Bang & others] *156
LOBECTOMY; LOBOTOMY: See Brain surgery
LONGEVITY: See Life expectancy; Old Age
LUNGS
abscess, postpneumonic, lobectomy in infancy and childhood for, [Moore] 2308—ab
Artificial Heart-Lung: See Oxygenator Pump
cancer and air pollution, Belgium, 2167
cancer and smoking, public's views on, United Kingdom, 1573
Cancer (Bronchogenic): See Bronchus cancer
cancer, death rates in England and Wales compared with U. S., (United Kingdom) 1395; [Hammond] 2058—ab
cancer, metastatic from thyroid, treatment, 1953
cancer, pathogenesis, [Feofilov] 839—ab
cancer, prognosis, [Winge] 448—ab
cancer, "radical pneumonectomy" as routine procedure in? [Johnson] 1815—ab
cancer, radioactive phosphorus intravenously, intra-arterially and intracardially for, [Ariel] 350—ab
cancer, surgery for, [Churchill] 1816—ab
cancer, United Kingdom, 318
cancer without roentgen findings, [Hansen] 1815—ab
collapse, atelectasis in asthma in children, [Luhr] 2194—ab
collapse, rehabilitation in respiratory paralysis, [Neu] *1610
decortication in purulent pleurisy, France, 91
disease, specific, ethereal oils combined with streptomycin for, [Liener] 468—ab
edema, intractable, emergency commissurotomy in, [Wessel & Webster] *1214
Emphysema: See Emphysema
function tests, India, 1681
Hyaline membrane: See Hyaline Membrane
idiopathic hemosiderosis, [Espinoza] 340—ab
infection, chronic, aerosol penicillin for? 2083
infiltration and fibrosis, risk of developing tuberculosis, [Chase] 2059—ab
involved in cryptococcosis, [Pelaez] 321—ab
lesions, thromboembolic, frequency, Denmark, 1924
lesions, tolazoline and lymph node biopsy in, Brazil, 2040
lethal complications of Asian influenza, treatment, [Moeschlin] 1158—ab
malfunction, oxygen-15 to study, WHO report, 1396
metastases and processes with suspected metastases, operative treatment, [Hansen] 1815—ab
of aged and emphysema, [Mayer] 1810—ab
pathergic granulomatosis, [Hood] 944—ab
pathology, perinatal, [Briggs] 460—ab
pulmonary hypertrophic osteoarthropathy absent in tuberculosis, [Skorneck] 108—ab
reserve, reduced, indications and contraindications for tracheal fenestration, [Mayer & others] *169
single, anesthesia in surgery, [Zhorov] 1417—ab
Surgery: See also Tuberculosis of Lung
surgery, postoperative venous thrombosis and pulmonary embolism in, [Merlo] 330—ab

LUNGS—Continued
torulosis, [Jacobs] 1949—ab
tumors, adenomatosis, symptomatology and pathology, [Weikzel] 1724—ab
LUPUS ERYTHEMATOSUS
disseminated, methylprednisolone for, side-effects in, [McMahon & Gordon] *1208
generalized, long-term prednisone in, [Kanee] 1812—ab
pemphigus seborrheicus, [Chargin] 1163—ab
systemic, and precipitation test, (reply) [Dubois & others] 813—C
systemic, pleuritis in early diagnosis, [Winslow] 946—ab
systemic, simulating acute surgical condition of abdomen, [Poliak] 1704—ab
systemic, triamcinolone for, (United Kingdom) 1258; (results) [Dubois] 1948—ab
transplacental passage of L. E. factor, [Mijer] 221—ab
LYMPH
protein changes in chronic filariasis, India, 1798
LYMPH NODES
biopsy in lung lesions and cancer of esophagus, Brazil, 2040
cervical, palpable, [Sage] *496
cervical, tuberculosis, treatment, [Schmid] 1810—ab; (and clinical aspects) [Beck] 2185—ab
prescalene biopsy, [Wilson] 2187—ab
scalene biopsy, clinical evaluation and application, [Shapiro] 2306—ab
tracheobronchial, tuberculous, involvement in maturity, [le Meilettier] 110—ab
LYMPHADENITIS
suppurative, due to BCG, [Mande] 324—ab
tuberculous, trypsin for, [Rapoport] 1581—ab
LYMPHANGIOMA
of genitalia in children, [Gueukdjian] 1279—ab
LYMPHEDEMA
chronic, of arm, treatment, 1834
LYMPHOBLASTOMA
follicular, giant, radioisotopes for, [Lawrence] 443—ab
LYMPHOGRANULOMA
malignant, leukocyte sedimentation rate in, [Bellesia] 2075—ab
LYMPHOMA
benign, of rectum and anus, [Holtz] 115—ab
LYMPHOSARCOMA
alcohol-induced pain in, [Braun & Shnider] *1882
in childhood, [Rosenberg] 1943—ab
leukocyte sedimentation rate in, [Bellesia] 2075—ab
d-LYSERGIC ACID DIETHYLAMIDE
treatment (adjunctive) in alcoholism, [Smith] 2068—ab
LYTIC DRUGS
new Soviet drugs for potentiated anesthesia, [Kazansky] 1824—ab

M

MEND: See under Education, Medical
MACROGLOBULINEMIA
Waldenström's, resembling multiple myeloma, [Hampton] 821—ab
MAGAZINES: See Journals
MAGNESIUM
sulfate dressings, rationale of use, (replies) [Tredici; and original consultant] 1298
MALARIA
association with prematurity, United Kingdom, 1927
complications: splenomegaly, India, 1680
therapy in Buerger's disease, [Corelli] 1723—ab
MALPRACTICE: See also Medical Jurisprudence; Medicolegal Abstracts at end of letter M
Committee on Medicolegal Problems, annual report, 1046
expert witness and advisory panels, [Sadusk] *2121
hospital liability, annual report on, 1045
insurance contract, [Hassard] *2117
medical liability, annual report on, 1044; 1045
tort liability of charitable hospitals to patients, [Medicine and the Law] 788
MALUCIDIN
yeast antibiotic with therapeutic and prophylactic properties, [Parfentjev] 1724—ab
"MAN Who Didn't Walk," medicolegal film, [Medicine and the Law] 72
MANSON, MARTIN L., wanted by F. B. I., (photo) 2160
MARCUMAR: See 3-(1-Phenylpropyl)-4-Hydroxycoumarin
MARFAN'S SYNDROME: See Arachnodactyly
MARRIAGE
annulment and epilepsy, United Kingdom, 435
compulsory premarital blood testing, results of epidemiologic study, 289—E
consanguineous, and heredity in second generation, (replies) [Roderick; and original consultant] 363; 364
MARRIAGE—Continued
decline in number of, 77
premarital examination, [Scholten] *1171
MARSILID: See Iproniazid
MASKS
in operating room, for patients with staphylococcic infections, 716; (replies) [Rolf; and original consultant] 2208
MASTITIS: See Breast inflammation
MASTOIDITIS
complications in antibiotic era, [Morrow] 124—ab
MATCHING PLAN: See Interns and Internships
MATERNITY
A. M. A. Committee on Maternal Care, annual report, 1108
mortality, (Brazil) 706; (Canada) 1678
mortality due to pulmonary embolism by amniotic fluid, [Carone] 2314—ab
mortality, factors in decline of, [Klein & Clahr] *237
mortality in ectopic pregnancy, [Malkasian & others] *985
Vanderbilt study of maternal and infant nutrition, (Council article) [McGanity & others] *2138
MATROMYCIN: See Oleandomycin phosphate
MEASLES
complications, India, 1257
distemper relationship, [Adams] 354—ab
modification, hazards of using parental blood for, (replies) [Berryhill; and original consultant] 1170
MECAMYLAMINE
treatment of hypertension, (India) 209; [Lucchelli] 834—ab
treatment of hypertension, potentiate with chlorothiazide, [Rochelle & others] *410
MEDIASTINUM
anterior, tumors of, [O'Gara] 223—ab
tumors, azygos vein dilatation simulating, [Shuford] 971—ab
MEDICAL . . . For most entries see under noun concerned as Economics, Medical
MEDICAL CARE: See Medical Service
MEDICAL CAREERS
film: "Helping Hands for Julie," annual report, 1075
MEDICAL CENTER: See also Health center
A. M. A. meets with 10 "third party" medical chiefs, [Medicine at Work] 1366
Chicago's West Side, new building, 2156
outpatient pastoral counseling in, [Young & Patrick] *24
MEDICAL DAYS
A. M. A. support for proposed International Medical Year, resolution on, 2150
Cohen (Samuel E.) Memorial Teaching Day, N. Y., 419
Diabetes Week, Nov. 16-22, 207
U of Illinois Medical Alumni Seminar Day, 1139; 1557
"Visiting Chief Day" at Sinai Hospital, Mich., 1558
MEDICAL EDUCATION FOR NATIONAL DEFENSE (MEND): See Education, Medical
MEDICAL EXAMINERS
system, annual report, 1046
MEDICAL JURISPRUDENCE: See also Malpractice; Medicine and the Law; Medicolegal Abstracts at end of letter M
A. M. A. Committee on Medicolegal Problems, annual report, 1046
A. M. A. Law Department, annual report, 1043
damages for widow of physician who died in line of duty, United Kingdom, 315
doctor fined for giving prescriptions for meperidine for own use, United Kingdom, 1153
ethical to discuss case with patient's lawyer? (Judicial Council opinion on) 1555
expert witness and advisory panels, [Sadusk] *2121
impartial medical testimony, 50—E
legal hurdles and professional assistance in setting up practice, [Business Practice] 1155
"Man Who Didn't Walk," medicolegal film, [Medicine and the Law] 72
MEDICOLEGAL ABSTRACTS, annual report, 1045
medicolegal aspects of occupational dermatoses, (Council report) 1351
"Medicolegal Forms with Legal Analysis," annual report on, 1044
National Interprofessional Code for Physicians and Attorneys, 1661—E; [Medicine and the Law] 1663
opinions of 10,000 lawyers sought in medicolegal study, [Medicine at Work] 1899
physicians need not give death certificates, United Kingdom, 2045
seminar on personal injury, Va., 295
U. of Pittsburgh established health law center, 295
MEDICAL PREPAREDNESS: See also Civil Defense
[Hays] *254
draft status of faculty members, interns and residents, 1534
extension of draft act, (A. M. A. resolution on) 71; (report) 1068; (law expires; new law provides for specialism) 1535
MEDICAL PREPAREDNESS—Continued
maneuvers after mock nuclear explosion, United Kingdom, 2172
national defense and medical education, selective Service System, 1533
physical examination of physicians for Armed Forces, 1249
physicians subject to draft call in 1959, (Council report) 906
survey of physicians separated from military service, (Council survey) 1904
MEDICAL RECORDS
central repository of medical credentials, 1070
diagnosis and reporting occupational diseases, [Johnstone] *1844
industrial, A. M. A. Committee on, annual report, 1066
librarians, schools for, 1543
technicians, schools for, 1544
MEDICAL RESEARCH COUNCIL (England)
annual report, 312
antigenic activity of British poliomyelitis vaccine, [Perkins] 118—ab
MEDICAL SERVICE
Alabama Community Medical Rating survey, (Council survey) 1378
American citizens' basic rights, A. M. A. resolution on, 69
A. M. A. *ad hoc* Committee on Medical Services for Construction Projects, new, 1067; (guide for) 1901
A. M. A. Committee on Medical Care for Industrial Workers, annual report, 1109
A. M. A. Council on, annual report, 1100
cost of, annual report, 1107
for Armed Forces Dependents: See Medicare
for Indigent: See Medically Indigent
plan of UMWA, relationships between medical profession and administrators of, A. M. A. resolutions on, 56; 66
planning medical facilities, annual report, 1114
plans, A. M. A. Committee on Prepayment Medical and Hospital Service, annual report, 1115
plans, Commission report, 56
plans, free choice of physician in, (A. M. A. resolution on) 64; (President's page) 416
plans, guide for judgment of third party plans, A. M. A. resolution on, 76
plans, major changes made, annual report, 1100
plans, medicine meets with labor, 289—E; 290
plans, part 2 of final report of A. M. A. Commission on, [Medicine at Work] 1367
plans report, A. M. A. meeting, 2149
plans, status report of Commission on National Emergency Medical Care plan, 58
plans, Suggested Guides for Medical Society Sponsored Voluntary Prepayment Plans, action on, 59; (report) 1116
plans under collective bargaining, 1663
plans, voluntary, [Medicine at Work] 1363
proposed regionalization in Puerto Rico, A. M. A. resolution on, 69
providing good service, [Business Practice] 1806
query 313 on ideas of, [Medicine at Work] 1895
review book on medical care, (Bureau article) [Bornet] *2025
type rendered, Medicare effect on, [Robinson] *1630
MEDICAL SUPPLIES
counteract mock alert shortages with substitutions, [Medicine at Work] 773
for poisoning emergencies, [Bidder & Sunshine] *514
MEDICALLY INDIGENT
A. M. A. Committee on Indigent Care, (annual report) 1105; (study state programs) [Medicine at Work] 1893
A. M. A. resolution on care for, 64; 70
care for in 1958, (Council report) 2151
endorse Vendor payments to physicians for services to, annual report, 1106
health services to, A. M. A. action at Minneapolis, (President's page) 2273
legislation on medical care for, annual report, 1106
physician's share of public costs for, [Medicine at Work] 770
public assistance, annual report, 1107
study medical care in Florida, [Medicine at Work] 1365
MEDICARE
A. M. A. resolutions on, 64; 66
A. M. A. statement regarding appropriations for, 1551
annual report on, 1047
curtailment of, especially regarding free choice of physicians, 414—E; (Council article) *696
experience with, [Robinson] *1630
resolution that A. M. A. encourage re-establishment of free choice principle, 2150
MEDICINE
amphibious and Marine Corps Field, 1541
as profession, obligations, (President's page) 1020
Aviation Medicine: See Aviation
educational matters in fields related to, annual report, 1094

MEDICINE—Continued
federal medical-health spending for 1959, 1452
historical note on curriculum, 1461
history, award for exhibit, 903
hypnosis in, (Council report) 186
Internal: See Internal Medicine
Legal: See Medical Jurisprudence
meets with labor, report of conference, 289—E; 290
military, meeting on, Belgium, 307
Organized: See also American Medical Association; Societies, Medical; and under names of specific societies
organized, liaison with higher education, 1486
Practice: See also General Practice; Specialties; and under name of specialties as Pediatrics
practice, business of, [Business Practice] 1932
practice, clinical, contributions of doctor of physical medicine, [Blau] *1217
practice, clinical, related to public health: aging, and long-term illness, [Underwood] *1000
practice, excerpts from brochure on business side of, (Business Practice) 818; 935; 1155; 1262; 1401; 1691; 1806; 1932; 2050; 2176
practice, government-sponsored, A. M. A. resolution on, 70
practice, group, A. M. A. compiles list of, 1114; [Medicine at Work] 1367
practice, liaison with medical schools, 1232
practice, private, abstracts on absence from work and its relation to, (Council article) 1019—E; 1133
practice, restrictive effect of Board certification on, A. M. A. resolution on, 65
Preventive: See Preventive Medicine
psychological, in general practice, United Kingdom, 1573
sensationalism in, United Kingdom, 809
socialization of, proposed regionalization in Puerto Rico, A. M. A. resolutions on, 69
socialized, are we making same mistakes British doctors made? (Miscellany) 931
Space Medicine: See Aviation
third parties in, 70; 289—E; 290; (President's page) 416; (conference with) 1116; [Medicine at Work] 1366
MEDICINE AND THE LAW
"Man Who Didn't Walk," medicolegal film, 72
National Interprofessional Code for Physicians and Attorneys, 1663
tax deduction of professional entertainment expenses; opinions of Judicial Council, 1555
tort liability of charitable hospitals to patients, 788
MEDICINE AT WORK
various subjects, 769; 1363; 1891 (annual report) 1039
MEDICOLEGAL: See Medical Jurisprudence; Medicine and the Law; Medicolegal Abstracts at end of letter M
MEDITERRANEAN fever, familial, [Heller] 821—ab
MEDROL: See Methylprednisolone
MEGACOLON: See Colon
MEGAESOPHAGUS: See Esophagus
MEGAPHEN: See Chlorpromazine
MEGIMIDE: See Bemegride
MEIGS' SYNDROME
[Stavem] 1938—ab
MELANCHOLIA
treatment: iproniazid, toxicity of, 50—E; (reply) [Robie] 1802—C
MELANIN
pigmentation, Bloch-Sulzberger's disease, [Lamy] 1278—ab
MELANOMA (melanosarcoma)
malignant, combined surgical and radiotherapeutic approach, [Dickson] 352—ab
primary malignant, of oral cavity, 105 cases, [Chaudhry] 2325—ab
MÉNIÈRE'S Disease: See Vertigo, aural
MENINGES
exclude subarachnoid method of therapy in tuberculous meningitis, [Shvedova] 1717—ab
hemorrhages of weak and premature infants, [Giraud] 1719—ab
subdural hematoma in elderly person, [Stuteville & Welch] *1445
MENINGITIS
aseptic, [Wilt] 339—ab
aseptic, epidemic of exanthem with, [Tyrrell] 1410—ab
aseptic, epidemiology of and related nonspecific disease, 1957, [Dubin] 1291—ab
aseptic, with rubelliform rash, isolate ECHO virus from, [Sultanian] 132—ab
cryptococcal, promising results in, [Rubin] 1271—ab
staphylococcal, novobiocin for, [Giusti] 337—ab
tuberculous, corticosteroids in, India, 1392; (advantages and limitations) [Dieckmann] 1580—ab
tuberculous, hydrocortisone for, [Cranny] 1284—ab
tuberculous, in children, intracranial calcification after, [Lorber] 958—ab
MENINGITIS—Continued
tuberculous, in children, treatment, exclude subarachnoid method, [Shvedova] 1717—ab
tuberculous, Neoteben for, [Gehrt] 1945—ab
tuberculous, treatment, [Giova] 440—ab
virus, epidemic due to ECHO 9 virus in Newfoundland, [Davies] 1290—ab
MENINGOENCEPHALITIS
mumps, effects of cortisone and ACTH in, [Spitznagel] 827—ab
serious Coxsackie infection in infants and children, [Hosier] 1941—ab
MENOPAUSE
icy cold nose and headaches in healthy woman going through, cause, 2084
myopathy of climacteric, [Kaeser] 1938—ab
MENSTRUATION
examine blood for tubercle bacilli in tuberculosis sanatorium, [Pickroth] 2070—ab
irregular, and sterility, in primary failure of anterior pituitary, cobalt radiation of value? 1732
premenstrual herpetic mouth lesion, (reply) [Houk] 844
premenstrual syndrome, France, 309
secondary amenorrhea and oligohypomenorrhea, incidence of spontaneous cure, [Westman] 2313—ab
MENTAL DEFICIENCY: See also Phenylketonuria
centers for children, first state-supported day care center in U. S., Del., 1909
child programs expand, 1913
children's colony at Conway, Ark., 908
etiology, 1422
retrolental fibroplasia associated with, [Williams] 2074—ab
true, chromatin-positive Klinefelter's syndrome and its relation to, [Prader] 2193—ab
200 cases reviewed, India, 1256
MENTAL DEPRESSION
atypical endogenous, vitamin B complex deficiency causing symptoms of, [Keuter] 1938—ab
treatment: iproniazid, toxicity of, 50—E; (reply) [Robie] 1802—C
MENTAL DISORDERS: See also Schizophrenic Reactions; and "Insanity" under Medicolegal Abstracts at end of letter M
Albert Prevost Institute for Mentally Ill accredited, Canada, 2282
Broadmoor asylum for criminally insane, facts about, United Kingdom, 98
Hospitalization for: See Hospitals, mental
how contagious is mental illness?, [Medicine at Work] 773
isolation stress in, [Ziskind] *1427
Joint Commission on: See Joint Commission
new neuropharmacoloy research center at Saint Elizabeth's Hospital, Washington, D. C., 2284
patients in hospitals, United Kingdom, 2047
psychiatric patients in general hospitals, A. M. A. resolution on, 71
psychometabolic changes in phenylketonuria, [Meyer] 219—ab
surgical treatment of tuberculosis of lung in mentally ill, [Mowlem] 330—ab
symptoms in liver insufficiency, [Harvald] 216—ab
treatment: carbutamide, Sweden, 211
treatment: meprobamate, India, 2293
treatment: methyiprednisolone, side-effects in, [McMahon & Gordon] *1208
treatment: perphenazine, Norway, 922
MENTAL HEALTH
A. M. A. Council on, annual report, 1052
in industry, A. M. A. Joint Committee on, annual report, 1067
increase in USPHS grants in, 1671
Joint Commission on: See Joint Commission
programs, 29 state commissioners review, 2033
troubled employee; economic loss, community problem, medical challenge, (Medicine at Work) [Golin] 1371; 1377—E
workers, grants to aid, 1384
MEPACRINE: See Quinacrine
MEPHENTERMINE
arrhythmias and, [Wilson] 1944—ab
MEPROBAMATE
addiction, [Boyd & others] *1839
addiction, habituation, [Halzlip] 337—ab
effects on brain damaged patients, [Carter] 337—ab
toxicity, idiosyncrasy, [Charkes] 2323—ab
treatment in psychiatry, (Finland) 308; (India) 2293
MERCAPTOPURINE
effects on acute leukemia in adult, [Kenis] 347—ab
MERCHANT MARINE: See Seamen
MERCURY
absorption and acrodynia relationship, 138
Diuretics: See Diuretics
vapor, acute poisoning from inhaling [Matthes] 2317—ab
MESCALINE
treatment (adjunctive) in alcoholism, [Smith] 2068—ab
MESONEPHROMA
of ovary, [Kay] 458—ab
METABOLISM: See also specific food groups or elements as Calcium, Carbohydrates
antimetabolites; produce experimental congenital malformations by dietary measures, (Council article) [Warkany] *2020
aspects of adrenalectomy in Cushing's syndrome, [Mason] 2308—ab
changes in normal pregnancy, (Council article) [Macy] *2265
effects of prednisone on, in rheumatoid arthritis [Ward] 836—ab
effects of rewarming after hypothermia, [Fisher] 839—ab
inborn error, hypophosphatasia, 415—E
psychometabolic changes in phenylketonuria, [Meyer] 219—ab
METACORTANDRACIN: See Prednisone
METACORTANDRALONE: See Prednisolone
METHEMOGLOBINEMIA
in infants, United Kingdom, 709
METHIONINE
effects on plasma lipids and atherogenesis in cholesterol-fed cockerels, [Stamler] 976—ab
METHOTREXATE: See 4-Amino-N[10]methyl pteroyiglutamic Acid
METHYL SALICYLATE
salicylate problem, [Cann] 1577—ab
METHYL VIOLET: See Methylrosaniline
β,β-METHYLETHYLGLUTARIMIDE: See Bemegride
METHYLPREDNISOLONE
treatment, side-effects noted, [McMahon & Gordon] *1208
METHYLROSANILINE
treatment of strongiloidiasis, (Brazil) 802; [Asfora] 1703—ab
METICORTELONE; METI-DERM: See Prednisolone
METICORTEN: See Prednisone
METOQUIN: See Quinacrine
METYCAINE: See Piperocaine
MICROCOCCUS: See Staphylococcus
MICROSCOPY
electron and light, correlate clinical findings with morphology as seen by, in renal disease, [Vernier] 1942—ab
MICROWAVES
medical considerations of exposure to, [Barron & Baraff] *1194
MIDICEL: See Sulfamethoxypyridazine
MILIA, treatment, 2333
MILITARY
care, estimate costs for, 1662
medical activities, A. M. A. Committee annual report on, 1068
medicine, meeting on, Belgium, 307
physicians, compensation for, annual report on, 1068
physicians on active duty, A. M. A. liaison with, annual report, 1069
Preparedness: See Medical Preparedness
service, active, physicians separated from, (Council survey) 1904
veterinary corps, annual report on, 1069
MILK
cow's, source of lactic acid bacilli in, 981
dried and fresh, utilization of calcium from, 844
dried skimmed, and kwashiorkor, [Pretorius] 223—ab
omit in infants diet for hereditary galactose disease, (Council report) [Guest] *2015
radioactivity in, report on, 914
MILTOWN: See Meprobamate
MINAMATA DISEASE
caused by eating contaminated fish, United Kingdom, 1683
MINERS
furunculosis in, epidemiology, [Ruys] 963—ab
iron, pneumoconiosis in, [Even] 1720—ab
MINNEAPOLIS, beautiful, welcome to A. M. A., 1021; (photos) 1022-1024
MINNESOTA Multiphasic Personality Inventory, medical students and, New Zealand, 433
MISSILES or pensions, (Miscellany) [Orr] *1686
MISSING PERSONS: See also Federal Bureau of Investigation
wanted by Salt Lake County (Utah) Sheriff's Office: Richard Nunley, (photo) 1791
MITRAL VALVE
insufficiency, direct vision correction of, [Kay] 946—ab
insufficiency, pure, clinical and hemodynamic observations, [Ross] 823—ab
stenosis, digital and instrumental commissurotomy for, 2000 cases, [Dogliotti] 2309—ab
stenosis, extreme, operations in patients over 45, [Soulié] 1270—ab
stenosis, rheumatic carditis after commissurotomy for, [Golubev] 104—ab
surgery, commissurotomy, clinical observations and concepts on, [Huang] 447—ab
surgery, commissurotomy; 50 cases with no mortality, [Sabety] 1267—ab
surgery, emergency commissurotomy in intractable pulmonary edema, [Wessel & Webster] *1214

MODERIL (rescinnamine): See Rauwolfia serpentina
MOLE: See Nevus
MONILIA
injection abscess due to, [Eriksen] 837—ab
MONILIASIS
gastric, [Tinajero Ayala] 940—ab
vaginal, nystatin for, [Caruso] 957—ab
MONONUCLEOSIS, INFECTIOUS
recurrence, followed or accompanied by infectious hepatitis? 2333
MONSTERS
rare, origin of fetal malformations, [de Gennaro] 2313—ab
MORPHINE
liberation of from codeine, [Pærregaard] 1721—ab
pharmacological activity, India, 806
MOTHERS: See Families; Maternity
MOTION PICTURES: See Moving Pictures
MOTOR VEHICLES: See Automobiles
MOUTH
bitter taste in, with fairly large hiatus hernia, cause, treatment, 136
breathing, indication for adenoidectomy? 362
buccal cancer, cobalt therapy, [Stuhl] 1824—ab
buccal streptokinase, clinical and experimental observations, [Innerfield] 124—ab
carcinomas, multicentric, [Moertel] 111—ab
herpetic lesion prior to menstruation, (reply) [Houk] 844
mycology, (United Kingdom) 2046; [Fox] 2302—ab
oral diagnosis of systemic disease, [Hopp] *748
poliomyelitis immune globulin (human) for herpetiform lesions, N. N. D., 183
surgery during anticoagulant therapy, 2081
tumors, primary malignant melanoma, 105 cases, [Chaudhry] 2325—ab
MOVEMENTS
disorders, involuntary, globus pallidus and thalamic lesions in, [Cooper] 2067—ab
MOVING PICTURES
A. M. A. annual reports, 1051; 1073
A. M. A. film library, annual report on reviews, 1074
"Annual Prize for Medico-Surgical Cinema," 2280
film on careers in medicine and health fields, annual report, 1075
film source file, annual report, 1075
first annual Symposium on Cinefluorography, N. Y., 700
international festivals, special committee to determine U. S. policy of participation in, 1075
"Man Who Didn't Walk," medicolegal film, [Medicine and the Law] 72
medicolegal film project, annual report, 1046
Ralph Creer to organize and direct an international exhibition in Japan, 695
special projects of medicolegal significance, annual report, 1044
MOVING PICTURES, MEDICAL (REVIEWS)
Assistive Devices for Paralyzed Upper Extremity, 938
Bence-Jones Protein Test, 1935
Biliary Duct Atresia, 1156
Breech Delivery, 1402
Career in Bacteriology, 1402
Cheiloplasty: Correction of Harelip, 2178
Clinic on Recognition and Management of Respiratory Acidosis, 2053; (illustrated review) [Smart & others] *2054
Cystectomy for Ovarian Dermoids, 710
Ectopia Cordis in a Twin, 1695
Ergot, the Story of a Parasite Fungus, 938
Femoral Artery Bypass Graft with Crimped Teflon, 1935
For the Love of Life, 710
From the Heart of Town, 1402
Helping Hands for Julie, 1695
Intracranial Aneurysms, 1935
Life in a Cell, 2178
Machine Mimics Man: The Artificial Kidney, 2297
No Time to Spare, 938
Operating Microscope in Otologic Surgery, 1935
Psychiatric Nursing: Nurse-Patient Relationship, 1156
Retropubic Prostatovesiculectomy, 2053
Someone is Watching, 1695
The Human Machine, 938
This is Nursing, 1695
Urethral Catheters, 938
You Are There: Discovery of Anesthesia, 1402
MUCIN
gastric, plasma-clearing effect in healthy and atherosclerotic subjects, [Rossi] 1699—ab
MUCOPROTEINS in Blood: See Blood
MUCORMYCOSIS
cerebral, [Smith] 2200—ab
MUCOUS MEMBRANES
oral, in diagnosis of systemic disease, [Hopp] *748
Touraine's aphthosis, [Thibault] 943—ab
MUMPS (epidemic parotitis)
complication: thrombopenic purpura, [Kolars & Spink] *2213
MUMPS—Continued
in adults, treatment, 1295
meningoencephalitis, effects of cortisone and ACTH in, [Spitznagel] 827—ab
viremia in, [Overman] 2061—ab
MURDER
by insulin, United Kingdom, 811
first-degree, etiologic factors in, [Duncan & others] *1755
MUSCLES
cramps, cause, treatment, relation to calcium intake, 2206
degeneration, electromyography in diagnosis and appraisal of, as related to neurological and/or muscular cause, 1733
electrical activity in infantile cerebrospastic paralysis, India, 92
electromyogram to evaluate neurological complications of spinal anesthesia, [Marinacci & Courville] *1337
gastrointestinal and striated, morphologic study of avitaminosis E in cystic fibrosis of pancreas, [Blanc] 2071—ab
myopathy of climacteric, [Kaeser] 1938—ab
respiratory, activity, effect of air flow resistance on, [Fink & others] *2245
tone, evaluation of newborn infant, [Apgar & others] *1985
weakness in infants and small children, examination for, [Johnson] *1306
MUSEUMS
Bureau of Exhibits annual report on, 1075
health, scholarships from, Ohio, 1141
MUSIC: See Physicians, avocations
MYASTHENIA GRAVIS
after removal of cystic thymus, electrolytes during crisis, [Fongi] 456—ab
blood cholinesterase and, after exposure to insecticides, (replies) [Trimble; and original consultant] 138
in children, [Sampayo] 1282—ab
MYCIFRADIN; MYCIGUENT: See Neomycin
MYCOSIS: See also specific mycoses, as Mucormycosis
of newborn, vaginitis in etiology, [Bret] 458—ab
MYCOSTATIN: See Nystatin
MYELOMA
multiple, blood cholesterol-globulin complex in, [Schless] 128—ab
multiple, natural history before radiological evidence, [Osserman] 1585—ab
multiple, proteinic and hematological changes, [Prato] 215—ab; 216—ab
multiple, Waldenström's macroglobulinemia resembling, [Hampton] 821—ab
MYELOSIS, erythremic: See under Anemia
MYLERAN: See Busulfan
MYOCARDITIS
Coxsackie infection in infants and children, [Hosier] 1941—ab
etiology: sulfonamides, Canada, 1922
interstitial, primary, epidemic outbreak, [Freundlich] 832—ab
MYOCARDIUM
consequences of coronary arterial occlusion in coronary atherosclerotic cardiopathy, [Himbert] 439—ab
electrode to control complete heart block, with artificial pacemaker, [Weirich] 822—ab
failure in toxemia of pregnancy, [Siliquini] 2191—ab; (correction) 2282
implant internal mammary artery into, evaluation in animals, [Patt] 113—ab
infarction, acute, anticoagulants for, [Richards] 439—ab; (long-term, United Kingdom) 924
infarction, acute, (264 cases) [Malach] (experience with anticoagulants) [Rosenberg] 213—ab
infarction, asystole in, cardiac pacemaker and intravenous isoproterenol for, [Solarz & others] *2124
infarction, diagnostic aids in, [Durant] 322—ab
infarction, digitalis and nitroglycerin for? 1297
infarction, effect of competitive industrial activity on severely disabled after, [Slipyan] *147; 190—E
infarction, elevated blood cholesterol level after, treatment, 844
infarction, gangrene of extremities after noradrenaline for, [Greenbaum] 125—ab
infarction, healing of, [Zaikin] 348—ab
infarction, heart anomalies with pulmonary hypertension, arteriosclerosis, pulmonary embolism and, (Diagnostic Problems) [Kushner & Szanto] *277
infarction in fetus, [Schuler] 1412—ab
infarction, influence of anticoagulants on occurrence of cardiac rupture and hemopericardium after, [Aarseth; Lange] 1415—ab
infarction, men who returned to work after, [Weiss & Weiss] *17
infarction, postoperative, [Feruglio] 2059—ab
infarction, rate by occupational group, [Biorck] 841—ab
infarction, SGO-transaminase test in, [Chapin] 939—ab
MYOCARDIUM—Continued
infarction, serum transaminase test in, calorimetric method, [Ciocia] 213—ab
infarction, shock in, drugs for, (Council report) [Selzer & Rytand] *762
infarction, Sweden, 2294
infarction with ventricular fibrillation, successful resuscitation in, [Bloomfield] 330—ab
infarcts, ruptured, histologic patterns, [Freeman] 348—ab
revascularization, division of internal mammary arteries, for, [Glover] 329—ab
MYOPIA
in children, dietary treatment, [Gardiner] 346—ab
progressive, thyroid disorder or allergy as cause? 1837
MYOTONIA
congenita, myxedema and pseudomyotonia, [Jarcho] 2058—ab
MYSOLINE: See Primidone
MYXEDEMA
diagnosis, treatment, 983
pseudomyotonia and myotonia congenita, [Jarcho] 2058—ab
psychosis from, [Rullo & Allan] *890
solitary pleural effusion due to, [Schneierson & Katz] *1003

Medicolegal Abstracts

INSANITY
civil; commitment; affidavits of physicians as privileged, 320
civil; commitment; physician appointed by court, 320
civil; commitment; physician's liability for, 320
LIBEL AND SLANDER
commitment proceedings; false affidavits; physician's liability, 320
commitment proceedings; privilege of witness, 320
MALPRACTICE
workmen's compensation in relation to, 320
WORKMEN'S COMPENSATION ACTS
malpractice by physicians; liability for, 320

N

NADISAN (carbutamide): See Sulfonylureas
NAILS (anatomic)
changes in alopecia universalis, 1837
splinter hemorrhages, United Kingdom, 315
subungual hemorrhage in pan washers, [Long] *1226
NAPHTHALENE
"scrap iron" intoxication, [Gadsden & others] *1220
NARCOTICS
addiction, annual report, 1053
department, report, India, 921
withdrawal symptoms in newborn infants, [Kunstadter & others] *1008
NATIONAL (societies): See also Societies and other Organizations at end of letter S
Committee on Aging of National Social Welfare Assembly, annual report, 1103
Defense: See Civil Defense; Medical Preparedness
Emergency Medical Care Plan, Commission on, annual report, 1071
Fund for Medical Education: See Foundations
Institutes of Health, Nobel Prize winners associated with research supported by, 1915
Intern Matching Program, 525; 1092
Interprofessional Code for Physicians and Attorneys, 1661—E; [Medicine and the Law] 1663
Joint Commission for Improvement of Care of Patient, (recommends individual hospitals form committees) 52; (report) [Medicine at Work] 1894
Medical Defense Conference: See Civil Defense
Research Council's postdoctoral fellowships, survey, 1478
Science Fair: See Science
Science Foundation: See Foundations
Society for Medical Research, (function of) 1489; (supports animal care meeting) 1662
NATIONAL HEALTH SERVICE (England)
American looks at, 317
are we making same mistakes British doctors made? British GP thinks so, (Miscellany) 931
cost of, 816; (cutting costs) 2174
failed to eliminate voluntary health insurance, [Follmann] *1641
general practice in, 314
health levy, 1396
hearing on, 312
hospital beds still scarce, 97
hospital's spending criticized, 927
merit awards for general practitioners, 98
"On Call to a Nation," radio celebrated 10th anniversary, 2296
painting depicts, 435
pay increase to physicians refused, 98

NATIONAL HEALTH SERVICE—Continued
pharmacists' remuneration, 927
politics and, 2047
proposed restriction on prescribing, 709
NAVY, UNITED STATES
establish course in nuclear nursing, 914
medical corps retirements, 1247; 1671
physicians from 12 nations attend training program, 914
Reserve, ensign 1915 program, 1537
Surgeon General Hogan receives Peruvian Cross of Merit, 1915
NAZI camp doctor, action on, United Kingdom, 97
NECK
palpable cervical lymph nodes, [Sage] *496
NEEDLES
plastic, for spontaneous pneumothorax, [Knuth & others] *177
used for spinal anesthesia, effects of detergents left as contaminants in, [Joseph & Denson] *1330
whiplash injuries: neurophysiological basis for pain, rehabilitation methods, [Seletz] *1750
within calyces, foreign body in kidney, [Naulleau] 344—ab
NEEDY: See Medically Indigent
NEGROES
homozygous hemoglobin C disease in, [Tanaka] 438—ab
Pelizaeus-Merzbacher disease in, [Tyler] 1270—ab
NEOMYCIN
toxicity: deafness caused by intramuscular use, [Körtge-Stoppard] 1285—ab
treatment, intraperitoneal, in acute bacterial peritonitis, [Greene] 1288—ab
treatment plus sulfadimidin in infant diarrhea, India, 1256
NEOPLASMS: See also Cancer; Sarcoma; Tumors; under region or organ affected.
metastatic, skeletal, activation of patient with, [Cummings & Rosenthal] *501
NEOTEBEN: See Isoniazid
NEPHRITIS
acute atypical, clinical observations, [Hansen] 1415—ab
acute glomerular, in children, India, 2043
after poliomyelitis vaccination related to? 360
in childhood, Norway, 310
NEPHROBLASTOMA
neuroblastomas and, [Nordøy] 1818—ab
NEPHROSIS; NEPHROTIC SYNDROME: See Kidneys, disease
NERVES
cranial, neurofibrosarcoma of, [Economou] 951—ab
damage in whiplash injuries, [Seletz] *1750
optic atrophy, hereditary, [Iverson] 345—ab
optic gliomas, [Dodge] 336—ab
vagotomy with gastric resection for peptic ulcer, long-term results, [Pailette & Harrington] *20
NERVOUS SYSTEM
abnormalities in Refsum's syndrome, United Kingdom, 927
central, paragonimiasis, [Shih] 1713—ab
complications of pertussis immunization, [Berg] 1280—ab
complications of spinal anesthesia, electromyogram to evaluate, [Marinacci & Courville] *1337
disability, activation of patient with skeletal metastatic neoplasia, [Cummings & Rosenthal] *501
disease after Asian influenza compared to 1918 influenza epidemic, 2332
disorder, minamata disease, United Kingdom, 1683
disorders after Asian influenza, [Horner] 118—ab; [McConkey] 954—ab
disorders in industry, A. M. A. Committee on, first meeting, 1066
electromyography in diagnosis and appraisal of muscular degeneration as related to neurological cause, 1733
involvement in cryptococcosis, [Pelaez] 321—ab
lesions, anatomoclinical study of fetal deaths, [Chosson] 119—ab
severe manifestations in children receiving Compazine, [Jabbour] 1581—ab
strain, the physician himself, [McArthur] *1740
study of botulism, [Castedo] 2303—ab
surgery, aspects of hypophysectomy in severe diabetes, [Javid] 1814—ab
surgery, care of severely injured patient, [Odom] *2087
surgery, report of American Academy of Neurological Surgery, Canada, 2292
NERVOUS SYSTEM, SYMPATHETIC
blocks in orthopedic surgery, [Brennan] *504
tumors, ganglioneuroma of cervical system, [Smyth] 447—ab
NEURALGIA
trigeminal, alcohol gasserian injection for, [Ecker] 119—ab
trigeminal, treatment, [Ruge] 1705—ab
NEURAMINIC ACID
in cerebrospinal fluid, deficiency in schizophrenia, [Bogoch] 1411—ab
NEURITIS
of recurrent laryngeal nerve, incidence, treatment, 2329
peripheral, pyridoxine to prevent after isoniazid, [Ross] *273; (reply) [Middlebrook] 1685—C
polyneuritis, after intradermal Asian influenza vaccine, (replies) [Steigman; and original consultant] 2086
NEUROBLASTOMA
nephroblastomas and, [Nordøy] 1818—ab
NEURODERMATITIS
disseminata, long-term prednisone in, [Kanee] 1812—ab
NEUROFIBROMATOSIS
Brazil, 430
NEUROFIBROSARCOMA: See Fibrosarcoma
NEUROLOGY
exchange mission to Soviet Union, 2284
National Neurological Research Foundation awards, 1143
NEUROSIS
cardiac, patient and physician in symptom formation, [Chambers & others] *1617
internal medicine and, Portugal, 211
symptoms in liver insufficiency, [Harvald] 216—ab
traumatic, "Man Who Didn't Walk," medicolegal film, [Medicine and the Law] 72
NEUROSYPHILIS
clinical and serological state of 416 well treated patients, long-term observation, [Kalz] 1413—ab
NEUROTROPISM
neurotrophic ulcers of feet, [Kelly & Coventry] *388
NEUTROPENIA: See Granulocytopenia
NEVUS
pigmented, multiple, in 12-year-old, treatment, 473
spider, and liver disease, India, 1925
NEW ENGLAND
medical-dental education plan, 1488
NEW YORK UNIVERSITY
Bellevue Medical Center, institute for rheumatic fever established at, 2278
center for rehabilitation services, 295
Institute for Crippled and Disabled joint rehabilitation research, 1560
NEW ZEALAND
welfare state down under, (Miscellany) [Hotchkiss] 933
NEWSPAPERS: See Press
NIADRIN: See Isoniazid
NICKEL
desensitization method, 1731
NICONYL: See Isoniazid
NICOTINIC ACID
in hypercholesteremia, N. N. D., 1773
NICOZIDE: See Isoniazid
NITROGEN DIOXIDE
inhalation causes chronic silo filler's disease, [Schell] 963—ab
NITROGEN MUSTARDS
treatment of Hodgkin's disease, [Moschidis] 959—ab
NITROGLYCERIN: See Glyceryl Trinitrate
NOISE
abatement in hospitals, United Kingdom, 312
is it a health problem? [Glorig & Summerfield] *370
tractor, effect on auditory sensitivity of operators, [Lierle] 1721—ab
NOMENCLATURE: See Terminology
NORADRENALINE; Norepinephrine: See Arternol
NOSE
discharge during eating after contrecoup brain damage; cause, treatment, 2081
icy cold, in healthy woman going through menopause, cause, 2084
NOVOBIOCIN
treatment of staphylococcal meningitis, [Giusti] 337—ab
NOVOCAIN: See Procaine
NUCLEAR ENERGY: See Atomic Energy
NUCLEUS
pulposus, herniation of, Denmark, 208
NUNLEY, RICHARD, missing person wanted by Salt Lake County Sheriff's Office, (photo) 1791
NUPERCAINE: See Dibucaine
NURSERY: See Hospitals, nurseries
NURSES AND NURSING
American Nursing Home Association—A. M. A. Liaison Committee, annual report, 1115
nasal carriage of Staphylococcus aureus by nurses, [Thompson] 969—ab
Navy course in nuclear nursing established, 914
nurse shortage, Sweden, 1801
nurses' working hours, dilemma of hospitals, United Kingdom, 808
nursing homes, annual report, 1103
nursing routine challenged, United Kingdom, 2049
NURSES AND NURSING—Continued
operating room training of students, A. M. A. resolution on, 68
schools, accreditation program for, report on, 58
streptomycin dermatitis in nurses, [Wilson] 465—ab
NUTRITION
A. M. A. Council annual report, 1057
blood cholesterol level and, [Picchio] 131—ab
blood proteins and, India, 92
clinical research fellowships, (Council announcement) 768
clinical, symposiums on, annual report, 1058
French Nestlé Company's fellowship, 78
infant and maternal, Vanderbilt study; effect of reproductive cycle on status and requirements, (Council article) [McGanity & others] *2138
maternal, and fetus, (Council article) [Hepner] *1774
research, grants for, 78
state of mother prior to conception, (Council article) [Stearns] *1655
NYDRAZID: See Isoniazid
NYLON
alopecia, United Kingdom, 1928
bifurcation grafts in arteriosclerosis, [Hill] 2309—ab
braided, in arterial bypass surgery, comparison with homografts, [Hohf] 2305—ab
brush, [Savill] 2319—ab
crimped, peripheral arterial grafts of, [Edwards] 452—ab
sensitivity, desensitization possible? 1295
tapes, self-adhering, [Gershman] 930—C
NYSTATIN
treatment of vaginal moniliasis, [Caruso] 957—ab

O

OBESITY
causes of, United Kingdom, 96
fatty acids and diets for, United Kingdom, 2046
in young child, treatment, 1167
peroneal paralysis, hazard in weight reduction, [Sprofkin] 826—ab
role of salt in fall of blood pressure accompanying reduction in, [Dahl] 322—ab
skin absorption of calories, 1169
OBITUARIES: See Physicians, death; and list of Deaths at end of letter D
OBSTETRICS
physiological basis for hormone therapy in, [de Alvarez & Smith] *489
promethazine in, [Carroll & Moir] *2218
regional anesthesia, reappraisal, [Bonica] *734
World Congress of, Canada, 89
OCCUPATIONAL Dermatoses; Diseases, Health, etc.: See under Industrial
OCCUPATIONAL THERAPY
India, 922
schools of, 1545
OCEAN
swimmer's itch and possible schistosomiasis from swimming in, (replies) [Schaefer; and original consultant] 1838
ODOR: See also Deodorants
bromhidrosis, etiology, 1592
OFFICE: See Physicians
OIDIUM (Candida) albicans Infection: See Monilia; Moniliasis
OIL
dietary, effect on bile-acid secretion and serum cholesterol, [Lewis] 131—ab
ethereal, with streptomycin for pulmonary diseases, [Liener] 468—ab
vegetable, substitute for animal fat to lower blood lipids, [Brown & Page] *1989
OLD AGE
aging division and senior center established by Bergen County, New Jersey, 2030
A. M. A. Committee on Aging, annual report, 1101
anticoagulant therapy to prevent cerebral thrombosis after one attack in? 1593
Ciba Foundation awards for research in aging, 77
clinico-instrumental techniques and serum analysis of presenile and senile patients with cardio-aortic atherosclerosis, [Rosselli] 970—ab
coarctation repair with relief of hypertension in man 57, [Kittle & others] *2066
conference calls for medical society action on aging, [Medicine at Work] 769; 779-E; 1102
conferences on aging, letter from Dr. Blasingame to U. S. Senate, 695
congestive heart failure in 46-year-old-woman, (Diagnostic Problems) [Kushner & Szanto] *277
dissolving corneal opacities in diabetic, 138; (reply) [Mann] 1838
emphysema and lungs in, [Mayer] 1810—ab

OLD AGE—Continued
fees, insurance, A. M. A. meeting report, 2148
homes for aged, United Kingdom, 1395
hyperthyroidism in, treatment, 1835
Joint Council to Improve the Health Care of the Aged, A. M. A. resolution on voluntary health insurance, 65; 68; (report) 1102
meprobamate addiction, [Boyd & others] *1839
mortality among centenarians, Pa., 701
National Committee on Aging of National Social Welfare Assembly, report on, 1103
ocular senescence, Belgium, 2290
operations for extreme mitral stenosis in, [Soulié] 1270—ab
outlook of vascular surgery in, [Hitchcock] 1267—ab
peptic ulcer after 60, clinical patterns, [Cutler] 449—ab
positive health program for, proceedings available, (Council note) 1554
problems related to public health, clinical practice and, [Underwood] *1000
provide voluntary health insurance for retired persons, (Bureau article) [Poliner] *194
public aspects of aging population, WHO report, 928
relation between condition of limbs and capacity for work, Denmark, 208
Social Security Benefits: See Forand Bill
subdural hematoma in, [Stuteville & Welch] *1445
Suggested Guides for Organization and Operation of Medical Society Committees on Aging approved, 59
treatment of psychiatric patients with carbutamide, Sweden, 211
tuberculous tracheobronchial lymph-node involvement in, [le Meilletier] 110—ab
OLEANDOMYCIN
phosphate, N. N. D., 1011
Triacetyl—: See Triacetyloleandomycin
OLIGOHYPOMENORRHEA: See Menstruation
OLIGOPHRENIA, PHENYLPYRUVIC: See Phenylketonuria
OLIVE pollen sensitivity, Israel, 2044
OPERATING ROOM: See Surgery
OPERATION: See Surgery; under names of specific organ and disease
OPHTHALMOLOGY
Association for Research in, annual report on, 1073
fellowship winners, 298
OPTOMETRISTS
commissioning by Armed Forces, annual report on, 1068
want amendment to Social Security Act, 2 letters from Dr. Blasingame to Congress regarding, 291
ORABETIC; ORANIL (carbutamide): See Sulfonylureas
ORCHESTRA: See Physicians, avocations
ORCHITIS: See Testes inflammation
ORF
4 cases in human beings, United Kingdom, 313
ORGAN, modern, playing, [Leisure Corner] 815; (reply) [Shull] 2297—C
ORIENT, degenerative cardiovascular disease in, [Schroeder] 1697—ab
ORINASE (tolbutamide): See Sulfonylureas
ORISUL: See p-Amino-benzolsulfonamido-phenyl-pyrazol
ORPHENADRINE HYDROCHLORIDE
treatment of Parkinsonism, Denmark, 208
ORTHOPEDICS
use of sympathetic blocks in, [Brennan] *504
OSTEOARTHROPATHY
hypertrophic pulmonary, absence in tuberculosis of lung, [Skorneck] 108—ab
in smallpox, India, 1255
OSTEOLYSIS
massive, [Johnson] 971—ab
OSTEOMYELITIS
chronic, spiramycin for, [Marchis] 126—ab
hypovitaminosis C and, in children, [della Casa] 1819—ab
OSTEOMYELOSCLEROSIS
[Levi] 110—ab
OSTEOPATHY
A. M. A. disapproved resolution on sovereignty of relationships between medical societies and, 2150
OSTEOPOROSIS
ulcerative colitis and, unusual features, 1426
OSTEOSARCOMA
trauma related to cause or aggravation of, 135
OTALGIA
with esophageal hiatus hernia, [Malherbe] 952—ab
OTITIS MEDIA
in nurslings after BCG vaccination, [Soboleva] 464—ab
treatment: antibiotics, United Kingdom, 2049

OUTPATIENT DEPARTMENT
pastoral counseling in medical center, [Young & Patrick] *24
OVARY
activity, vaginal cytology to study, India, 2041
cancer, mesonephric carcinomas, [Kay] 458—ab
cancer, radioactive gold for, WHO report, 1397
cystadenocarcinoma, and uterine pregnancy, [Chávez] 2315—ab
cysts, progesterone for, 1294
excision in breast cancer, correlate results with estrogen production, [Bulbrook] 947—ab
excision plus adrenalectomy in metastasizing mammary cancer, [Hellström] 829—ab; [Davis] 2306—ab
function, preserved in treatment of early cancer of cervix uteri in young women, [Krebs] 1939—ab
OVIDUCTS
acute salpingitis, views on prognosis and treatment, [Hedberg] 1162—ab
surgical management of tubal factor in infertility, [Cauwet] *991
tuberculous salpingitis, treatment, [Rydén] 1161—ab
OXAMYCIN: See Cycloserine
OXYGEN
deficiency, anoxia and hypoxia, new facts about the heart, (reply) [Hyman] 1154—C
deficiency of abnormal physiologic origin as final common pathway in gastroduodenal ulcer genesis, [Palmer] 105—ab
15, in study of pulmonary malfunction, WHO report, 1396
hazards of therapy in respiratory disease, [Sherman] *1866
manual and mechanical control of ventilation during cyclopropane anesthesia, [Wester & others] *2249
OXYGENATOR PUMP (mechanical heart)
direct coronary artery perfusion for aortic valve surgery, [Kay & others] *1767
extracorporeal circulation, 44 interventions with opened heart under, [Dubost] 1160—ab
immediate postoperative period following total body perfusion, [Matthews] 1708—ab
OXYTETRACYCLINE
treatment (intraperitoneal) in diffuse bacterial peritonitis in childhood, [Soave] 965—ab
treatment (intraperitoneal) in peritonitis of appendical origin, [Adwan] 332—ab
vs. silver nitrate in newborn eyes, incidence of conjunctivitis after, [Mathieu] 121—ab
OXYTOCIN
hormone which inactivates, Austria, 2040

P

PAS: See Aminosalicylic Acid
PACEMAKER: See under Heart
PAIN
abdominal, generalized, and acute renal failure, (Diagnostic Problems) [Kushner & Szanto] *1778
abdominal, upper, esophagitis causes, [Bernstein & others] *27
activation of patient with skeletal metastatic neoplasia, [Cummings & Rosenthal] *501
alcohol-induced, in Hodgkin's disease, [Braun & Shnider] *1882
chest, of colon origin, [Palmer] 1702—ab
factor in syncope in healthy young adults, [Dermksian & Lamb] *1200
generalized congenital analgesia, [Lamy] 464—ab
in diagnosis of peripheral arterial emboli, [Phelan & Young] *1299
in tongue in multiple sclerosis, treatment, 843
neurophysiological basis for, in whiplash injuries, [Seletz] *1750
problem back, [Kirkpatrick] *1864
temporomandibular joint, unilateral, diagnosis and treatment, 472
testicular, during coitus, 15 years after crushing injury, treatment, 1956
PALATE
cleft, in second generation, prevent defect in third generation, 1957
PALFIUM: See 2, 2-Diphenyl-3-methyl-4-morpholino-butyryl-pyrrolidine
PAMISYL: See Aminosalicylic Acid
PAN washers, subungual hemorrhage in, [Long] *1226
PANCREAS
abscess, gas as sign of, [Agnos] 944—ab
cancer, clinical study, [Birnbaum] 324—ab
cancer, diagnosis, (exfoliative cytology, rapid method of duodenal intubation) [Raskin] 440—ab; (secretin test) [Wenger] 441—ab
cancer, radiation therapy in, [Billingsley] 1725—ab
cystic fibrosis, Austria, 1797

PANCREAS—Continued
cystic fibrosis, avitaminosis E in; morphology of gastrointestinal and striated muscle, [Blanc] 2071—ab
cystic fibrosis, long-term study of 105 cases, [Shwachman] 832—ab
cystic fibrosis, rectal prolapse in, [Kulczycki] 1699—ab
disease, clinical evaluation of starch tolerance test, [Nugent & Millhon] *2260
hypoglycemic sulfonamides show selective tropism for, France, 803
infarcts, [McKay] 2179—ab
insulin-producing capacity of diabetic children, [Klein] 1718—ab
pseudocyst, clinical and surgical aspects, 58 cases, [Waugh] 451—ab
retrograde surgical drainage for chronic relapsing pancreatitis, [Puestow] 217—ab
PANCREATITIS
acute, and hyperdiastasuria after partial gastrectomy, [Wallensten] 1708—ab
acute, atypical symptom-sign complex of, [Donhauser] 446—ab
acute, Brazil, 2041
acute, generalized abdominal pain and acute renal failure, (Diagnostic Problems) [Kushner & Szanto] *1778
chronic relapsing, retrograde surgical drainage of pancreas for, [Puestow] 217—ab
PANCYTOPENIA: See under Anemia
PANEL
advisory, and expert witness, [Sadusk] *2121
PANEMAX: See Papain
PANMYCIN: See Tetracycline
PAPAIN
Panemax in treatment of strongyloidiasis, (Brazil) 802; [Asfora] 1703—ab
PAPILLOMA
of large intestine, [Goldgraber] 967—ab
PARA-AMINOSALICYLIC ACID: See Aminosalicylic Acid
PARAGONIMIASIS
of central nervous system, [Shih] 1713—ab
PARALYSIS
agitans, chemopallidectomy for, 2 years' experience, [Paxton & Dow] *755
agitans, excessive salivation in, treatment, 138
agitans, globus pallidus and thalamic lesions in, basal ganglia surgery for, [Cooper] 2067—ab
agitans, is it communicable? 1594
agitans, orphenadrine for, Denmark, 208
agitans, surgery for, symposium on, (reply) [Krusen & Ellwood] 319—C
cerebral, extra-articular arthrodesis of subtalar joint in, [Baker & Dodelin] *1005
cerebral, Little's disease, relation to premature birth, [Churchill] 831—ab
electromyogram to evaluate neurological complications of spinal anesthesia, [Marinacci & Courville] *1337
in Poliomyelitis: See Poliomyelitis
infantile cerebrospastic, electrical activity of muscles in, India, 92
peroneal, hazard of weight reduction, [Sprofkin] 826—ab
respiratory, acute intermittent porphyria with, [Doll & others] *1973
respiratory, long-term, rehabilitation in, [Neu] *1616
PARAMYOTONIA CONGENITA
[Drager] 828—ab
PARANOIA: See Psychosis, paranoia
PARA-PAS; PARASAL: See Aminosalicylic Acid
PARAPLEGIA
after spinal anesthesia, [Joseph & Denson] *1330
PARATHYROID
crisis, cause of sudden death, [Hewson] 1157—ab
idiopathic hypoparathyroidism, [Halvorsen] 1157—ab
primary chief-cell hyperplasia of, new entity surgery of hyperparathyroidism, [Cope] 2186—ab
PARENTS: See Families
PARENZYME: See Trypsin
PARESTHESIA
diagnosis of peripheral arterial emboli, [Phelan & Young] *1299
PARKINSONISM: See Paralysis agitans
PAROTID GLAND
swelling, intermittent, due to ill-fitting dentures, [Furstenberg] 1579—ab
PAROTITIS, EPIDEMIC: See Mumps
PASTORS: See Religion
PATHOGENS in tobacco, 363
PATHOLOGY
handling tuberculous specimens, 134
pathologist's death certificate, "what is cause of death?" [Erhardt] *161; (reply) [Ziegler] 1260—C
PATIENTS
care, 5 health groups aim: improve, [Medicine at Work] 1894
Chronically Ill: See Disease, chronic
ethical to disclose case history to insurance company? (Judicial Council opinion on) 1556

PATIENTS—Continued
ethical to have another doctor perform surgery without knowledge and consent of? (Judicial Council opinion on) 1556
in cardiac symptom formation, [Chambers & others] *1617
National Joint Commission recommends formation in individual hospitals of committees on care of, 52
parking and, Canada, 1679
tort liability of charitable hospitals to, [Medicine and the Law] 788
PEDIATRICS
fellowships in, 911; 912; 1244
in transition, training, [Wheatley] *856; (reply) [DeBacker] 1929—C
PELIZAEUS-MERZBACHER DISEASE: See under Brain
PELVIS
cancer, metastatic, from rectum, treatment, 472
PEMPHIGUS
seborrheicus, Senear-Usher syndrome, [Chargin] 1163—ab
PEMPIDINE
new hypotensive agent, United Kingdom, 318
pharmacology and clinical use in hypertension, [Harington] 1416—ab
PENICILLIN
Benzathine G: See Benzathine Penicillin G
oral, United Kingdom, 2171
Phenoxymethyl: See Phenoxymethyl Penicillin
procaine G parenterally, and oral phenoxymethyl penicillin compared, [Mintz] 1277—ab
prophylaxis in tetanus? 1169
resistant staphylococci, Denmark, 919
toxicity fatal, follow-up study, (reply) [Cooper] 319—C
toxicity, hazards, [Herrell] *1875
toxicity, penicillinase for reactions, [Becker] 346—ab
toxicity: sensitivity in poliomyelitis vaccine, United Kingdom, 2046
toxicity: sensitivity to penicillin cream, United Kingdom, 811
treatment, aerosol, in chronic lung infection? 2083
treatment of streptococcal infections, 5 oral and one parenteral form compared, [Breese] 1283—ab
treatment plus dihydrostreptomycin, Sweden, 807
V: See Phenoxymethyl Penicillin
PENICILLINASE
toxicity, allergy, 2207
treatment of penicillin reactions, [Becker] 346—ab
PENIS
cancer, (Sweden) 211; [Ekström] 343—ab
induration of corpora cavernosa, Peyronie's disease, treatment 1955
possible role of smegma in carcinoma of cervix, [Heins] 2312—ab
PENSIONS or missiles, (Miscellany) [Orr] *1686
1:2:2:6:6-PENTAMETHYLPIPERIDINE: See Pempidine
PENTOLINIUM TARTRATE
toxicity; death from, United Kingdom, 926
PENTOTHAL: See Thiopental
PEN-VEE: See Phenoxymethyl Penicillin
PEPTIC ULCER
after 60, clinical patterns, [Cutler] 449—ab
bleeding duodenal, bio-flavonoids and diet for, [Weiss] 216—ab
bleeding duodenal, emergency surgical treatment, [Westland] 334—ab
bleeding, 5-year follow-up, with and without surgery, [Donaldson] 1266—ab
cause of, United Kingdom, 312
etiology: biliary tract disease? 2080
etiology; triamcinolone, [Brown] 2072—ab
higher than average, significant occurrence of tuberculosis in, United Kingdom, 313
hypoxia of abnormal physiologic origin as final common pathway in, [Palmer] 105—ab
in children, [Hatfield] 2192—ab
of esophagus, and peptic esophagitis, [Wolf] 128—ab
perforating, in infants, [Grasveld] 218—ab
protein therapy effects on serum proteins in, [Dupuy] 1406—ab
pulmonary tuberculosis and, [Waingortin] 823—ab
serum protein picture in gastroduodenal ulcer, [Dupuy] 1406—ab
surgical treatment, cancer of stomach after resection for, [Cote] 1160—ab
surgical treatment, exclusion gastrectomy removing mucous membrane of pylorus effective in preventing disease or recurrence? 227
surgical treatment, long-term results in, [Pailette & Harrington] *20
surgical treatment of duodenal ulcer, [Smithwick] 1159—ab
surgical treatment, results of gastrectomy, [Bonniot] (resection according to Pólya) [Noring] 449—ab
PEPTIC ULCER—Continued
surgical treatment, stump carcinoma after, [DeBray] 825—ab
PERICARDITIS
benign acute, associated with Coxsackie viruses, [Movitt] 106—ab
benign acute, in childhood, [Bono] 833—ab
PERICARDIUM: See Hemopericardium
PERINEUM
urethral diverticulum, complication of ischium r moval, [Comarr & Bors] *2060
PERIODICALS: See Journals
PERITONEUM
cavity, soft drink bottle in, [Hoge & Thedieck] *40
effusions, malignant, prednisone in, [Franco & others] *1645
intraperitoneal adhesions, experimental study, [Jackson] 2065—ab
PERITONITIS
appendical origin, treatment with and without intraperitoneal terramycin, [Adwan] 332—ab
bacterial acute, intraperitoneal neomycin for, [Greene] 1288—ab
bacterial diffuse, in childhood, intraperitoneal oxytetracycline and tetracycline for, [Soave] 965—ab
PERMAPEN: See Benzathine Penicillin G
PERPHENAZINE
treatment in psychiatry, Norway, 922
PERSONALITY
Minnesota Multiphasic Inventory, medical students and, New Zealand, 433
speech relationship, U. of Cincinnati study, 1560
PERTUSSIS: See Whooping Cough
PESTICIDES
A. M. A. Committee on, annual report, 1060
health hazards to humans and wildlife from government sponsored mass control programs, 1061
PEYRONIE'S Disease: See Penis
PHARMACISTS
case of druggist and disappearing rental, [Medicine at Work] 1896
remuneration, United Kingdom, 927
PHARMACOLOGY
new journals: *Biochemical Pharmacology, Toxicology and Applied Pharmacology*, and *Journal of Medicinal and Pharmaceutical Chemistry*, 1245
new neuropharmacology research center, Washington, D. C., 2284
PHARYNX
hypopharynx, cancer, Brazil, 802
PHENACETIN: See Acetophenetidin
PHENANTHROLINEQUINONE
derivatives, treatment of amebiasis, India, 803
PHENERGAN: See Promethazine
N^1-β-PHENETHYL-FORMAMIDINYLIMINO-UREA HYDROCHLORIDE: See Phenylethyldiguanide
PHENOBARBITAL
primidone biotransformation to, intoxication from, [Plaa & others] *1769
PHENOXYBENZAMINE HYDROCHLORIDE
treatment (combined), antihypertensive agent, [Roberts] 1946—ab
PHENOXYMETHYL PENICILLIN
in prophylaxis of recurrent rheumatic fever, [Kaplan] 1941—ab
oral, vs. parenteral procaine penicillin G, [Mintz] 1277—ab
potassium V and, antibacterial activity of serum after, [Kunin] 2071—ab
PHENPROCOUMON: See 3-(1-Phenylpropyl)-4-Hydroxycoumarin
PHENYLALANINE
diet low in, for phenylketonuria in children, [Berry] 462—ab
diet low in, for psychometabolic changes in phenylketonuria, [Meyer] 219—ab
PHENYLETHYLDIGUANIDE
nonsulfonylurea oral hypoglycemic agent, clinical trials, [Krall] 835—ab
treatment of diabetes, (United Kingdom) 316; [Hall] 1286—ab
PHENYLKETONURIA
chemical and clinical observations during treatment, [Berry] 462—ab
psychometabolic changes in, low-phenylalanine diet for, [Meyer] 219—ab
3-(1-PHENYLPROPYL)-4-HYDROXYCOUMARIN
agent for short-term anticoagulant therapy, [Priest] 821—ab
PHENYLPYRUVIC OLIGOPHRENIA: See Phenylketonuria
PHEOCHROMOCYTOMA
diabetes and glycosuria, [Freedman] 1703—ab
in etiology of recurrent night sweats, 2208
recurrent, case in previously treated child, [Cane] 464—ab
treatment, current status, (Council report) [Thorn & others] *2130
PHLEBITIS
peripheral, spontaneous acute, acenocoumarol for, [Ruilo & others] *743
PHONOCARDIOGRAM: See Heart
PHOSPHATASE
hypophosphatasia, 415—E
PHOSPHORUS
dietary, and aluminum hydroxide, (reply) [Farrar] 1838
inorganic phosphate, urinary excretion in patients with renal calcium stone, [Hodgkinson] 1820—ab
organic phosphate poisoning, histochemical proof of, [Petty] 2199—ab
radioactive colloidal chromic, destruction of hypophysis in prostate cancer, [Johnson] 1814—ab
radioactive, for hemorrhagic thrombocythemia, [Fountain] 1582—ab
radioactive, intravenously, intra-arterially and intracardially, for lung cancer, [Ariel] 350—ab
PHOTOGRAPHY
medical, exhibit wins award, 903
old photographs of autos wanted, Ill., 1909
PHYSICAL EXAMINATION
for muscle weakness in infants and small children, [Johnson] *1306
for physicians for Armed Forces, 1249
for school children, tuberculin test in, (replies) [Faber; and original consultant] 984
importance of routine cancer checks in cancer survival, [Archibald] 1930—C
periodic, for physician himself, [McArthur] *1740
premarital, [Scholten] *1171
20-year study of physiological measurements in senior airline pilots, [Kidera] *1188
PHYSICAL FITNESS
annual report of Bureau of Health Education, 1078
of American youth, annual report, 1076
programs, longitudinal research in, [McCammon & Sexton] *1440
PHYSICAL IMPAIRMENT: See Abnormalities; Disability; Handicapped
PHYSICAL MEDICINE
therapeutic contributions of doctor of, [Blau] *1217
PHYSICAL THERAPY
mobile unit, United Kingdom, 807
schools of, 1546
sympathetic blocks with, in orthopedic surgery, [Brennan] *504
PHYSICIANS: See also General Practitioners; Specialties; under name of specific specialists, as Surgeons
advisor to industrial management, [Keene] *1851
aid for, in South Carolina, [Smith] 1684—C
are we making same mistakes British doctors made? (Miscellany) 931
avocations, gems and precious stones, [Leisure Corner] 1261
avocations, motoring, [Leisure Corner] 103
avocations, orchestras for, N. Y., 2158
avocations, painting depicting Health Service, United Kingdom, 435
avocations, playing the modern organ, [Leisure Corner] 815; (reply) [Shull] 2297—C
avocations, subpostmaster, United Kingdom, 2049
avocations, wood carving, [Leisure Corner] 1930
biographical records, annual report, 1082
central repository of medical credentials, annual report on, 1070
certification of absence from work by, 1019—E
compensations in occupational medicine, [Belknap] *1847
damages for widow of doctor who died in line of duty, United Kingdom, 315
Deaths: See also list of Deaths at end of letter D
death of Warren W. Furey, 1793
direct or VENDOR system of payments to, from public funds, Council reports on, 58; 1106
discharged from Armed Forces, annual report on, 1069
doctor fined for giving prescriptions for meperidine for own use, United Kingdom, 1153
ethical to discuss case with patient's lawyer? (Judicial Council opinion on) 1555
foreign, American urology's obligation to, [Barnes] *750
foreign, Educational Council for, annual report on, 1089; 1090
foreign, in V. A., 1532
foreign, licensed by State Boards, 167:622, May 31, 1958; (correction) 168:2161, Dec. 20, 1958
foreign, "Present and Future Status of Foreign Medical School Credentials in U. S.," annual report on, 1089
foreign, training in U. S. hospitals, 1523

PHYSICIANS—Continued
foreign, 12 nations attend Navy training program, 914
"free choice" and other limitations under Medicare, 414—E; (Council article) *696
free choice of in medical service plans, (A. M. A. resolutions on) 64; 70; (President's page) 416
hospital, and general practitioner change places, Denmark, 706
iatrogenic adrenal insufficiency, treatment, (Council report) [Thorn & others] *2130
iatrogenic disease and anesthesia, [Dundee] 974—ab
iatrogenic diseases in children, 895—E
in cardiac symptom formation, [Chambers & others] *1617
in federal service, participation in local medical society affairs by, reports on, 58; 1069
military, A. M. A. liaison with, annual report on, 1069
military, compensation for, annual report on, 1068
National Interprofessional Code for Attorneys and, 1661—E; [Medicine and the Law] 1663
Nazi camp doctor, action on, United Kingdom, 97
need not give death certificates, United Kingdom, 2045
nominated for football honor, 2281
obligations in medicine as a profession, (President's page) 1020
office, case of druggist and disappearing rental, [Medicine at Work] 1896
office, excerpts from brochure on Business Side of Medical Practice, [Buiness Practice] 818; 935; 1155; 1262; 1401; 1691; 1806; 1932; 2050; 2176
office, permissible to hold open house? (Judicial Council opinion on) 1555
on school boards, W. Va., 911
pay increase refused, United Kingdom, 98
pay, Japan, 806
physical medicine, therapeutic contributions of, [Blau] *1217
physician himself, [McArthur] *1740
place in public affairs, (Miscellany) [Judd] *99
placement, annual reports on, 1069; 1112
placement, profession as "matchmaker," [Medicine at Work] 777
placement, survey, Alabama, [Medicine at Work] 777
practicing, as your practice grows, [Business Practice] 2176
practicing, experience with Community Health Council questionnaire, [Babow & others] *268
practicing, private, relation to those not in private practice, 1112
relation to administrators of medical care plan of UMWA, A. M. A. resolutions on, 66
relation to hospitals, A. M. A. resolution on, 68
relation to patient, assay of antianginal agents; "rapport period," [Cole & others] *275
relationships: problems related to public health, clinical practice, aging, and long-term illness, [Underwood] *1000
schools and, national conference on, annual report on, 1079
separated from active military service, (Council survey) 1904
share of public costs for indigent care, [Medicine at Work] 770
Social Security for: See Social Security
Southeast, information service for, 79
subject to draft call in 1959, (Council report) 906
supply and placement, Alabama Community Medical Rating survey, (Council survey) 1378
supply, distribution, United Kingdom, 2047
supply, import, Sweden, 807
supply, shortage of radiologists, Norway, 1572
supply, shortage, Sweden, 1801
V. A., A. M. A. membership for, annual report, 1117
what insurance should a doctor carry? [Business Practice] 1691
women, Dr. Sabin honored in National Statuary Hall, Colo., 1787
women, Dr. Snow, state "General Practitioner of Year," Mass., 1910
PHYSICS, MEDICAL
A. M. A. Council on, annual report, 1059
of atmosphere and space, international symposium on, 797; [Medicine at Work] 1369
PHYSIOLOGY
measurements in 100 senior airline pilots, 20-year study, [Kidera] *1188
PICK'S DISEASE: See Polyserositis
PIGMENTATION: See also Melanin pigmentation
hypopigmentation following planing, how can one get an even suntan? 361
incontinentia pigmenti, [Lamy] 1278—ab
multiple pigmented nevi in 12-year-old, treatment, 473

PIGMENTATION—Continued
of gums, diagnosis, 1296
progressive pigmentary dermatosis, treatment, (replies) [Benedek; and original consultant] 1594
PIGS
Coxsackie virus pneumonia possibly transmitted to human subjects by, [Verlinde] 1825—ab
PILONIDAL SINUS
cysts, carcinomatous degeneration, [Matt] 2311—ab
PIPEROCAINE HYDROCHLORIDE
as spinal anesthetic, pharmacology, [Featherstone] *1327
PITOCIN: See Oxytocin
PITUITARY
anterior, primary failure, cobalt radiation of value? 1732
destruction by radioactive colloidal chromic phosphate in prostate cancer, [Johnson] 1814—ab
destruction by radioactive seeds, WHO report, 1397
destruction, hypophysectomy with yttrium^{90} implant, [Gleadhill] 2307—ab
destruction, implant yttrium-90 for metastatic mammary cancer, United Kingdom, 315
dwarfism, diagnosis and treatment, [Martin] 957—ab
excision, effects on intelligence, [Schon] 2310—ab
excision for breast cancer, (United Kingdom) 316; [Baron] 949—ab
excision in breast cancer, correlate clinical results with estrogen production, [Bulbrook] 948—ab
excision, in severe diabetes, neurosurgical aspects, [Javid] 1814—ab
extract to increase growth in boy with von Gierke's disease? 1594
Hormones: See Corticotropin; Thyrotropin
interstitial radiation with yttrium 90; indications, technique, results, [Dogliotti] 1289—ab
transection of stalk for metastatic mammary carcinoma, [Dugger] 2184—ab
tumors, ACTH-producing, [Nelson] 1158—ab
tumors, adenomas and craniopharyngiomas, surgical treatment with adrenocortical hormone therapy, [Decourt] 454—ab
PITYRIASIS
rosea, etiology, 1958
versicolor, treatment, 1956
PLACEBO
in evaluating meprobamate addiction, [Boyd & others] *1839
PLACEMENT: See Physicians
PLACENTA
passage of L. E. factor, [Mijer] 221—ab
previa, fetal blood loss with, 1168
PLANING
hypopigmentation after, how can one get an even suntan? 361
PLASMA TRANSFUSION: See Blood Transfusion
PLASMIN: See Fibrinolysin
PLASMOCYTOMA
unusual types, Austria, 2040
PLASTIC
needle for spontaneous pneumothorax, [Knuth & others] *177
PLATELETS: See Blood platelets
PLEURA
biopsy in diagnosis of effusions, [Hill] 946—ab
effusion, solitary, due to myxedema, [Schneierson & Katz] *1003
effusions, malignant, prednisone for, [Franco & others] *1645
manifestations in cirrhosis, France, 92
pleuritis in systemic lupus erythematosus, importance in early diagnosis, [Winslow] 946—ab
PLEURISY
purulent, pulmonary decortication in, France, 91
serofibrinous, in pulmonary tuberculosis in children, incidence of morbidity and disorders secondary to, before and after antibiotic era, [Batini] 2317—ab
with effusion, India, 1393
PNEUMOCHOLECYSTITIS: See Gallbladder, inflammation
PNEUMONIA
complications: lung abscess in infancy and childhood, lobectomy for, [Moore] 2308—ab
complications: pseudo air cysts in children, [Schlager] 1817—ab
Coxsackie, possibility of infection by pigs, [Verlinde] 1825—ab
plasma-cell, in infants, etiology, [Moser] 1413—ab
plasma-cell, interstitial, adenoviruses cause? [Vivell] 1412—ab
post-influenzal, fulminating, [Buechner] 105—ab

PNEUMONIA—Continued
staphylococcic, in infancy and childhood, [Hendren & Haggerty] *6; (cortisone for) [Bühler] 222—ab
Staphylococcus aureus importance in 1957 influenza epidemic, [Robertson] 1585—ab
with abscess formation in infants, therapy, [Bucha] 222—ab
PNEUMONOCONIOSIS
diagnosis of silicosis, Sweden, 1394
from bagasse, cement and agave, [Baader] 1721—ab
in iron miners, [Even] 1720—ab
information on bagassosis due to sugar cane sensitivity, 134
meeting, Geneva, Switzerland, 2282
PNEUMOPERITONEUM, ARTIFICIAL
how frequent is spontaneous pneumothorax found in? 2083
in tuberculosis of lung, India, 434
PNEUMOTHORAX, ARTIFICIAL
for pulmonary tuberculosis, [Rogue] 2300—ab
PNEUMOTHORAX, SPONTANEOUS
chronic recurring, due to endometriosis of diaphragm, [Maurer & others] *2013
complications of routine laparotomies or therapeutic pneumoperitoneum, 2083
in Asian influenza, [Welsh] 1698—ab
surgical treatment using plastic needle, [Knuth & others] *177
POISON CONTROL CENTERS
American Association of, formed, 2159
in Denver, first in Colo., 1665
plea for, Sweden, 2294
POISONING
accidental, control: progress report, [Cann & others] *717
acute, from inhaling mercury vapor, [Matthes] 2317—ab
A. M. A. Committee on Toxicology, annual report, 1062
barbituric acid, acute, treatment, 10 years' experience, [Louw] 457—ab
carbon tetrachloride, in hairdressers, [Warshaw] 710—C
cascara, United Kingdom, 316
citrate, United Kingdom, 926
economic, A. M. A. report discussing morbidity and mortality to be published, 1060
emergencies, efficient handling of, [Bidder & Sunshine] *514
Food: See Food poisoning
in Children: See Children
Industrial: See Industrial Dermatoses; Industrial Diseases
phosphate, organic, histochemical proof of, [Petty] 2199—ab
radium, where are cases of? [Clark] *761; 779—E; (reply: teeth changes as signs of) [Dalitsch; Clark] 1929—C
"scrap iron" intoxication, [Gadsden & others] *1220
suicidal, [Norbury] 1712—ab
POLIOMYELITIS
acute and convalescent, abnormalities in central respiratory regulation, [Plum] 2067—ab
antibodies before and after Salk vaccination in infants and children, [Buser] 220—ab
antibodies, persistence of, Canada, 91; [Müller] 341—ab
center, grant from National Foundation, Ga., 908
encephalomyelitis myalgica epidemica resembles, [Gsell] 117—ab
epidemiology, in Switzerland, [Schär] 219—ab; 220—ab
foreign virologists visit U. S., 1562
in etiology of muscular dystrophy in mental deficient boy of 8, 1422
morbidity trends, 1913
multiple cases in one family, [Scarabicchi] 827—ab
National Foundation: See Foundations
paralytic, increase in, plea for continuing vaccination program, 51—E
paralytic, prevention of urinary calculi after, [Plum] *1302
paralytic, respiratory, rehabilitation in, [Neu] *1610
Portugal, 310
prevalence, new cases, N. Y., 910
prevalence, U. S., 80; 109; 297; 423; 702; 1385; 1564; 1669; 1790; 1913; 2032
statistics on, 1143
vaccination, A. M. A. action, (annual report) 1051; 2150
vaccination, death after, United Kingdom, 709
vaccination, first results, [Berger] 220—ab
vaccination (mass) with live attenuated virus, in Belgian Congo and Ruanda-Urundi, [Courtois] 1589—ab
vaccination, nephritis related to? 360
vaccination, (Norway) 96; (United Kingdom) 313; 925
vaccination, reminding patients to obtain, 1958
vaccine attenuated virus, theoretic foundation and selection of strains; use of Sabin vaccine, [Verlinde] 956—ab

POLIOMYELITIS—Continued
vaccine, British, antigenic activity, [Perkins] 118—ab
vaccine, intradermal and oral administration, United Kingdom, 709
vaccine, response of pregnant women and their infants to, [Martins da Silva & others] *1
vaccine (Salk type), potency and safety, [Sunada] 1291—ab
vaccine, sensitivity to penicillin in, United Kingdom, 2046
vaccine, serological response of infants to, [Perkins] 1164—ab
vaccine, 3 years' experience in Ontario, [Brown] 1825—ab
virus in children under five, United Kingdom, 2296
virus isolations in Hawaii, first, [Yuen] 1411—ab
POLIOMYELITIS IMMUNE GLOBULIN (Human)
for oral herpetiform lesions, N. N. D., 183
POLITICS
in National Health Service, United Kingdom, 2047
younging of electorates, annual report on, 1081
POLLENS
factors in drug evaluation in hay fever, (reply) [Engelsher] 1685—C
filters, most effective type, 1593
olive, sensitivity to, Israel, 2044
sampling stations established, N. Y., 910
POLYCYCLINE: See Tetracycline
POLYCYTHEMIA
erythremic myelosis and familial thalassemia, [Olshin] 1281—ab
nephrogenous, [Forssell] 1821—ab
vera, busulfan for, [Louis] *1880
vera, host factors in, [Damon] 438—ab
vera, pyrimethamine for, [Frost] 2323—ab
POLYHYDRAMNIOS
aid to early diagnosis of congenital obstruction of alimentary tract, [Lloyd] 462—ab
POLYNEURITIS: See Neuritis
POLYPS
colon, and malignancy, Brazil, 430
lymphoid, of rectum and anus, [Holtz] 115—ab
polyposis of colon, Brazil, 2168
POLYSACCHARIDES
lipo-, highly purified bacterial, for inflammation of adnexa, [Fricke] 1273—ab
POLYSEROSITIS
edema, anasarca and, anomalous case of, [Kowntree & others] *411
PONTOCAINE: See Tetracaine
POPULATION
state, ratio of first-year students to, 1510
PORPHOBILINOGEN in Urine: See Urine
PORPHYRIA
acute intermittent, with respiratory paralysis, [Doll & others] *1973
cutanea tarda, vesicular and bullous disease, 982
urinary delta-aminolevulic acid and porphobilinogen in different types of, [Haeger] 2181—ab
PORTACAVAL SHUNT
emergency, [Mikkelsen] 949—ab
esophageal varices before and after, [Evans] 129—ab
PORTAL VEIN
cirrhosis, heart disease in patients dying with, [Lunseth] 2180—ab
hypertension, shunting procedures, [Partington] 452—ab
pressure, determine by catheterization of hepatic vein and by direct puncture during operation, [Bücherl] 452—ab
splenoportography, advantages and disadvantages, [Figley] 973—ab
venography in children, India, 921
POST OFFICE, doctor as subpostmaster, United Kingdom, 2049
POSTAGE STAMPS
Noah Webster 4-cent bicentennial stamp, (Miscellany) [Thoms] 1804
POSTOPERATIVE: See Surgery
POSTURE
change, factor in syncope in healthy young adults, [Dermksian & Lamb] *1200
exercises for asthmatic children, [Scherr & Frankel] *1996
sleeping position of children, 1592
POTASSIUM
citrate, open heart surgery with elective cardiac arrest by, [Sones] 2063—ab
in Blood: See Blood
intoxication, fulminating, in atypical heat stroke, [Baxter] 109—ab
POUDRAGE
in surgery for endocardial fibroelastosis or anomalous left coronary artery, [Paul] 112—ab
PRECEPTORSHIPS
at U. of Wisconsin, 30-year experiment, 1466
PREDNISOLONE
acetate, N. N. D., 183
Methyl—: See Methylprednisolone
treatment, massive doses in acute leukemia in adults, [Granville] 1286—ab
PREDNISONE
amidopyrine and: Pyracortine, India, 2043
treatment in tuberculosis, (India) 1681; (Portugal) 2170
treatment (long-term) in lupus erythematosus, scleroderma and neurodermatitis disseminata, [Kanee] 1812—ab
treatment of acute leukemia, (France) 209; [Picard] 1264—ab; (massive doses in adults) [Granville] 1286—ab
treatment of diphtheritic laryngeal obstruction, India, 707
treatment of malignant effusions, [Franco & others] *1645
treatment of rheumatoid arthritis, metabolic and clinical effects, [Ward] 836—ab
treatment plus diamthazol for non-inflammatory scalp ringworm, [Kanof] 2318—ab
PREECLAMPSIA: See Eclampsia
PREGNANCY
after mastectomy, 1955
after pneumonectomy for tuberculosis, 74 pregnancies, [Laros] 2312—ab
age of, probabilities at 38, 362
anemia in, United Kingdom, 923; (iron-deficiency, prophylaxis) [Kerr] 1939—ab
at high altitudes, study, 299
blood cholesterol during, (reply) [Wetstone] 844
complications: ear eczema, hormones influence? 227
complications: edema, acetazolamide for, [Morra] 2070—ab
complications: edema, chlorothiazide for, [Chesley] 2071—ab
complications: heart disease, current status, [Kaufman] 338—ab
complications: kyphoscoliosis, [Marchand] 2314—ab
complications: narcotic addiction, withdrawal symptoms in newborn infants, [Kunstadter & others] *1008
complications: precordial murmurs during, [Hurst] 1939—ab
complications: regional ileitis, 2332
contraindicated after surgery for breast carcinoma? 2334
cytologic-colposcopic observations of ectocervix of, [Lang] 457—ab
desensitization of Rh-negative mother with a haptene? 2207
diabetes in, clinical signs of neonatal tetany in babies of diabetics, [Craig] 1717—ab
diagnosis, progesterone-induced withdrawal bleeding as, [Hayden] 1272—ab
duration, postmaturation, France, 309
ectopic, analysis of 322 cases, [Malkasian & others] *985
ectopic, cervical, [Mayberger] 120—ab
hormone which inactivates oxytocin, Austria, 2040
hydramnios in diagnosis of congenital obstruction of alimentary tract, maternal and fetal factors, [Lloyd] 462—ab
"Multiple Birth Roster" established in New York City, 1666
normal, metabolic and biochemical changes in, (Council article) [Macy] *2265
nutrition in, and fetus, (Council article) [Hepner] *1774
nutrition in, Vanderbilt study of maternal and infant nutrition, (Council article) [McGanity & others] *2138
nutritional state prior to conception, (Council article) [Stearns] *1655
ophthalmoscopic examination during, Brazil, 706
previous, can Rh factor change without? 1833
produce experimental congenital malformations by dietary measures, (Council article) [Warkany] *2020
prognosis after hypofibrinogenemia, 2085
radiation during, leukemia in infant due to, United Kingdom, 314
response of women and their infants to poliomyelitis vaccine, [Martins da Silva & others] *1
Toxemia: See also Eclampsia
toxemia, factors in decline of maternal mortality, [Klein & Clahr] *237
toxemia, influence of chlorothiazide on water and electrolyte excretion in, [de Alvarez & O'Lane] *2226
toxemia, late, intravenous Apresoline in, [Johnson] 459—ab
toxemia, low-sodium diets in, (Council report [Danowski] *1886
toxemia, myocardial failure in, [Siliquini] 2191—ab; (correction) 2282
uterine, cystadenocarcinoma of ovary and, [Chávez] 2315—ab
vibration effects on, 474
wastage, and diabetes, A. M. A. Subcommittee on, annual report, 1060
PREOPERATIVE: See Surgery
PREPUCE
herpes progenitalis, treatment, 473
PRESCRIPTIONS
doctor fined for prescribing meperidine for his own use, United Kingdom, 1153
prescribing and dispensing drugs by physicians, (Judicial Council opinion on) 1556
proposed restriction on, United Kingdom, 709
PRESS
A. M. A. News, bi-weekly, 58; (report on) 1042
Chronic Illness Newsletter, annual report, 1103
Los Angeles Times, article reprinted from, (Miscellany) [Hotchkiss] 933
relations of A. M. A., annual report, 1050
sensationalism in medicine, United Kingdom, 809
PREVENTIVE MEDICINE
2146—E
in private practice, [Vastine] *1185
PRIMIDONE
toxicity, due to biotransformation to phenobarbital, [Piaa & others] *1769
PRISCOLINE: See Tolazoline
PRIVILEGED COMMUNICATIONS
annual report of Law Department, 1045
PRIZE FIGHTING: See Boxing
PRIZES AND HONORS
Academy of Psychosomatic Medicine, award of merit, 299
Air Force Commendation Medal, (N. C.) 1560: 2284
Albany Medical College annual lectureship award, 1241
Allstate Safety Crusade Certificate of Commendation in traffic safety, Va., 76
Alvarenga Prize, Texas, 421
American Cancer Society's "Medallion and Citation," S. C., 1243
American College of Chest Physicians essay contest, 298
American College of Surgeons, Distinguished Service Award, W. Va., 2031
American Heart Association, cardiovascular research award, Ohio, 1242
A. M. A. award to CBS for broadcasts of San Francisco meeting, (photo) 193
A. M. A. awards, annual reports, 1051; 1054: 1073
A. M. A. awards at San Francisco, 53; (for Scientific Exhibits) 900; (Section Awards) 901
A. M. A. Distinguished Service Award, submit nominations, 1039
A. M. A. General Practitioner award, (nominations open) 1554; (award to Dr. L. A. Coffin, photos) 2147—E; 2274
American Medical Writers' Association, distinguished service awards, 1140; 1562
American Society of Maxillofacial Surgeons, essay contest, 1245
American Writers' Association honor award, Minn., 1141
"Annual Prize for Medico-Surgical Cinema," 2280
Arkansas Conference of Tuberculosis Workers, first annual award, 2155
Billings medals, 901
Blackwell (Elizabeth) award of Hobart and William Smith Colleges, 2160
Borden award, 423; 1559
Bronze Medal of Canadian and American Medical Association, and first prize of New York State Medical Association, N. H., 909
Burdick (Ward) award of American Society of Clinical Pathologists, Minn., 2157
Caldwell medal, Calif., 1239
Ciba Foundation awards for aging research, 77
Commander of the Order of Merit of the Republic of Italy, Chicago, 418
Dearborn Chamber of Commerce "Distinguished Citizen's Award," Mich., 2278
Fiske (Caleb) Prize of Rhode Island Medical Society, essay contest open, 77
Fringer (Alma A.) memorial award from Illinois Tuberculosis Association, 293
Gairdner Foundation international awards in arthritis and heart disease, first, 2281
"General Practitioner of the Year," Mass., 1910
Gerontological Research Foundation award, 1145
Goldberger award, 53; 1058
Hektoen medals, 901
Howe (William A.) Honor Award of American School Health Association to Dr. Bauer, 1663
Huddilston (Roselle W.) Medal, Maine, 1909
Illinois State Medical Society, "Outstanding General Practitioner for 1959," 2156
Institute of Medicine of Chicago offers annual prize in medicine, 198; (George H. Coleman medal) 908
International Award ACQUI TERME of Rheumatology, 1246
International Memorial Award for Psoriasis Research announced by Baylor University, 421

PRIZES AND HONORS—Continued
Jones (T. Duckett) Memorial Award, 1669
Kimble Methodology Research Award, Mass., 1788
Knudsen (W. S.) award for "most outstanding" contributions to industrial medicine, Calif., 197
Langer (Ann) Cancer Research Foundation, 2280
Lasker (Albert) award, annual, 794
Lederle Laboratories faculty awards, 79
Lovelace Foundation award, first annual, Pa., 2031
Mental Hospitals Achievement Award of American Psychiatric Association, Neb., 2276
Michigan Society of Neurology and Psychiatry research award, 1910
Mississippi Valley Medical Society's Honor Award, La., 1787
National Medical Association, distinguished service award gold medal, Chicago, 418
Neuberg Medal award in Biochemistry, N. Y. 1560
New York U. Medal, 910
Nobel Prize winners, 1915; 2159; (United Kingdom) 2296
Northwestern U. Medical School, Founders Day Awards, 2029
offered by doctors to foster scholarship among teenagers, [Medicine at Work] 1891
Officer in National Order of Merit and Honor of the Republic of Haiti, N. Y., 1789
"Oregon Doctor of the Year," 1141
Osborne and Mendel award of American Institute of Nutrition, 1059
Osler (William) Medal of American Association for History of Medicine open, 200
"outstanding protector of public health," U. of Buffalo, 1559
Peruvian Cross of Merit to Surgeon General Hogan, 1915
Phi Lambda Kappa Medical Fraternity award for nonphysicians' contribution to medicine, Md., 1140
President's Committee on Employment of Physically Handicapped, special citation, N. Y., 1667
Radiological Society of North America Gold Medal, Calif., 2028
Reed (Walter) Medal, 1244; 1915
Sedgwick Memorial Medal, 794; 1239
Sheard-Sanford prize for meritorious research by medical students, 1143
Sheridan Rotary Club, "Outstanding Citizen" award, Ind., 1558
Société internationale de chirurgie, President's Prize of, N. Y., 2158
Society of Biological Psychiatry award, 200
Speidel (Edwin and Hanna) Award of International College of Surgeons, N. Y., 700
Sunderman award for "Clinical Scientist of Year," Puerto Rico, 295
U. of Minnesota's outstanding achievement award, N. Y., 2030
U. of North Dakota Alumni Association Distinguished Service Citation and Modern Medicine Distinguished Achievement award, 75
U. of Rochester Medical Alumni Association, Gold Medal, 1666
Van Meter Award, 1562; (New Zealand) 1570
Wellcome Prize, Hawaii, 2277
Wisconsin Anti-Tuberculosis Association, "award for distinguished service," 794
PROCAINE
absorption of local anesthetic, [Campbell & Adriani] *873
as spinal anesthetic, pharmacology, [Featherstone] *1327
PROCHLORPERAZINE
toxicity: severe neurological manifestations in children, [Jabbour] 1581—ab
PROCTOCAINE
treatment with surgery in hemorrhoids, India, 433
PRODOX: See Hydroxyprogesterone Acetate
PROFESSIONAL SECRECY: See Privileged Communications
PROFESSIONS
medicine as, obligations of physicians, (President's page) 1020
PROGESTERONE
induced withdrawal bleeding as test for pregnancy, [Hayden] 1272—ab
treatment of ovarian cysts, 1294
PROMAZINE HYDROCHLORIDE
toxicity: arterial thrombosis with gangrene, [Opinsky & others] *1224
PROMETHAZINE HYDROCHLORIDE, N. F.
treatment in obstetrics, 2½ year survey, [Carroll & Moir] *2218
treatment of tetanus, [Miller & Stoelting] *393
PROPASA: See Aminosalicylic Acid
PROPRIETARIES
advertising of, (A. M. A. resolution on) 68; (report) 1052
PROPTOSIS: See Eyes, proptosis
2,5 di-PROPYLOXY-3,6-DIETHYLENIMINOBENZOQUINONE
treatment of advanced malignant neoplasms, [Brunschwig] 964—ab
PROSTATE
cancer, cytodiagnosis, [Frank] 466—ab
cancer, "depot" estrogens for, [Salsano] 1287—ab
cancer, destroy hypophysis with radioactive colloidal chromic phosphate in, [Johnson] 1814—ab
cancer, diagnostic meaning of calcium metabolism changes after sex steroids in, [Molinatti] 1947—ab
cancer, diethylstilbestrol treatment cause night sweats and dizziness? 983
cancer, serum mucoproteins in, [Arcadi] 1943—ab
cancer, 200 cases treated conservatively, [Satter] 2321—ab
vesiculoprostatitis, chronic: a reorientation, [Leader] *995
PROTEIN
absorption and regional enteritis, 2205
changes in multiple myeloma, [Prato] 215—ab; 216—ab
dietary, effects on cholesterolemia and atherogenesis in cockerels on high-fat, high-cholesterol mash, [Stamler] 976—ab
dietary, effects on plasma lipids and atherogenesis in cholesterol-fed cockerels, [Stamler] 976—ab
in Blood: See Blood proteins
in Lymph: See Lymph
moieties, characterization of lipoproteins, grant to U. of Florida for study of, 790
therapy, influence on serum proteins in ulcer, [Dupuy] 1406—ab
PROTHROMADIN: See Warfarin Sodium
PROTHROMBIN: See Blood prothrombin
PROTOVERATRINE
treatment (combined), antihypertensive agent, [Roberts] 1946—ab
PROTOZOA
intestinal, acquisition by children in Egypt, [Kuntz] 1282—ab
uveitis caused by, [Kessel] 345—ab
PRURITUS
complicating cirrhosis treatment, 1297
trimeprazine orally for, [Williams] 2318—ab
PSEUDOHERMAPHRODITISM: See Hermaphroditism
PSEUDOMONAS
aeruginosa, endocarditis due to, prognosis, (reply) [Gottsegen] 1929—C
PSEUDOMYOTONIA: See Myotonia
PSORIASIS
fat and calcium metabolism relationship, 716
Kaposi's sarcoma superimposed on erythroderma psoriaticum, [Segal] 465—ab
research, International Memorial Award in, Baylor University announces, 421
PSYCHIATRY
child, traineeships in, Mass., 1140
grant support for training in, 1249
meprobamate in, Finland, 308
perphenazine in, Norway, 922
problems and preferences for instruction, appraisal of reports by general practitioners, [Wittson & others] *1747
PSYCHOLOGY
psychological medicine in general practice, United Kingdom, 1573
PSYCHOSIS
advanced, reserpine for, [Norman] 955—ab
after Asian influenza, Israel, 2044
alcoholic, Sweden, 2294
etiology: amphetamine, United Kingdom, 2046
etiology: myxedema, [Rullo & Allan] *890
paranoia, isolation stress in, [Ziskind] *1427
PSYCHOTHERAPY
for emotional problems after organic brain disease, 136; (replies) [Paley; and original consultant] 2086
PTYALISM, treatment, 2204
PUBERTY: See also Adolescence
precocious, and hormone excretion in girls, [Bulbrook] 1819—ab
PUBLIC
affairs, doctor's place in, (Miscellany) [Judd] *99
Health: See Health, public
opinion on cancer, United Kingdom, 1573
relations, A. M. A. annual report on, 1049
relations and economics, Canada, 90
relations, successful adventure using television: Rochester, N. Y. Health Forum, [Townsend & Steinhausen] *1983
PUERPERIUM
intracranial venous thrombosis in, [dalle Ore] 956—ab
postpuerperal cerebral thrombophlebitis, France, 803
PUERTO RICO
proposed regionalization, A. M. A. resolution on, 69
PULMONARY VALVE
stenosis, surgery for, [Pliego] 1710—ab
PULSE
pulseless disease, [di Bello] 1698—ab
PUMP: See Oxygenator Pump
PUNCH in galvanized container poisonous, Calif., 790
PURINE
antagonists for choriocarcinoma and related trophoblastic tumors, [Li] 1416—ab
6-PURINETHIOL; Purinethol: See Mercaptopurine
PURPURA
etiology: chlorothiazide, [Jaffe & Kierland] *2264
thrombocytopenic, idiopathic, treatment, [Watson-Williams] 1822—ab
thrombocytopenic, neonatal, India, 1798
thrombocytopenic, treatment, United Kingdom, 811
thrombopenic, as complication of mumps, [Kolars & Spink] *2213
thrombopenic, radioactive phosphorus for, [Fountain] 1582—ab
PYELONEPHRITIS
ascending, role of ureter in pathogenesis, [Talbot] *1595
chronic, hyperchloremic acidosis in, [Lathem] 215—ab
clinical and histologic spectrum of, [Schreiner] 820—ab
Norway, 310
PYODERMA
in runners, Sweden, 211
PYRACORTINE
for rheumatic diseases, India, 2043
PYRAMIDON: See Aminopyrine
PYRAZINAMIDE
new antituberculosis drug, [Zorini] 834—ab
treatment (topical) in tuberculous empyema, [Costa] 2324—ab
PYREXAL: See Lipopolysaccharides
PYRIDOXINE (vitamin B6)
to prevent isoniazid toxicity, [Ross] *273; (reply) [Middlebrook] 1685—C
treatment plus hydrocortisone in multiple sclerosis, [Reyes Oliveros] 220—ab
PYRIMETHAMINE
treatment of polycythemia vera, [Frost] 2323—ab
PYRIZIDIN: See Isoniazid

Q

Q FEVER
United Kingdom, 2047
QUACKERY
A. M. A. Bureau of Investigation annual report, 1063
case of convicted psychiatrist, Dr. Reddick, who issued licenses to naturopaths, etc., 1064
QUINACRINE
antimalarial drug for arthritis, Denmark, 208; [Eriendsson] 964—ab
QUININE
resin, tubeless gastric analysis using, India, 210
QUINOLINE: See Chloroquine
QUINONES
2,5 di-propyloxy-3,6-diethyleniminobenzoquinone for advanced malignant neoplasms, [Brunschwig] 964—ab
tetrahydroxyquinone, oral treatment of keloids, [Kelly] 2073—ab

R

RI VIRUSES: See Adenovirus
RABIES
in coyote, Mich., 909
in Latin America, Dr. Habel consults on, D. C., 2028
in Oswego County, N. Y., 294
vaccine (duck embryo), N. N. D., 1771
RACES: See also Negroes
colored immigrants, United Kingdom, 2170
RADAR
medical considerations of exposure to, [Barron & Baraff] *1194
RADIATION
cystitis, [Pool] *854
effects of relatively low amounts on bodily function, U. of Tennessee study, 1561
hazard, A. M. A. resolution on, 70
hazards, United Kingdom, 2049
in mother during pregnancy, leukemia in infant due to, United Kingdom, 314
ionizing, A. M. A. *ad hoc* Committee on, 56; 1059; [Medicine at Work] 1370
leukemia from, factor in thymus predisposes mice to, United Kingdom, 312
neoplasms after, United Kingdom, 2295
Nuclear: See Atomic Energy
report on, United Kingdom, 926
therapy center, Conn., 1665
therapy for cancer of cervix, 397 cases, [Frick] 2313—ab
therapy in carcinoma of pancreas, [Billingsley] 1725—ab
therapy, value in inoperable bronchogenic carcinoma, [Sicher] 352—ab
therapy with surgery in malignant melanoma, [Dickson] 352—ab

RADIO
A. M. A. activities, annual reports, 1050; 1077
A. M. A. award to CBS for broadcasts of San Francisco meeting, (photo) 193
"On Call to a Nation," celebrated 10th anniversary of National Health Service, United Kingdom, 2296
stations, high-power, health hazard from, United Kingdom, 2174
RADIOACTIVE: See also Atomic Energy; and under individual chemical elements as Iodine
fall-out, Norway, 922
fall-out protection, [Medicine at Work] 769; 779—E
heparin, synthesis and metabolism of, [Eiber] 1159—ab
interstitial implantation for primary bronchogenic carcinoma, [Henschke] 351—ab
isotopes for giant follicular lymphoblastoma, [Lawrence] 443—ab
radioactivity in milk, 914
seeds, pituitary ablation by means of, WHO report, 1397
water, Atomic Energy Commission to lease or sell, 301
water, heavy, excretion, 362
RADIOLOGISTS
life expectancy among, United Kingdom, 311
shortage of, Norway, 1572
RADIOLOGY
fellowships in radiological physics, 1563
research grants and fellowships, 79; 1245
RADIUM
parenterally and orally administered, 779—E
poisoning, where are cases of, [Clark] *761; 779—E; (reply: teeth changes as signs of) [Dalitsch; Clark] 1929—C
therapy for cervical carcinoma, pseudoneoplastic changes of vesical mucosa after, [Natale] 349—ab
RAUDIXIN; Rauloydin; Raupina; Raurine; Rauserpa; Rauwiloid: See Rauwolfia serpentina
RAUWOLFIA SERPENTINA (alseroxylon; rauwolfia; reserpine)
effects of reserpine on alimentary tract, New Zealand, 432
toxicity: gynecomastia, explanation of, 136
treatment (combined), antihypertensive agent, [Roberts] 1946—ab
treatment of advanced psychoses, [Norman] 955—ab
treatment of hypertension, potentiate with chlorothiazide, [Rochelle & others] *410
von RECKLINGHAUSEN'S DISEASE: See Neurofibromatosis
RECTUM
biopsy in diagnosis of amebic colitis, [Juniper] 127—ab
cancer, metastases in pelvis, treatment, 472
cancer of rectosigmoid and, anterior resection for, 5-year survival, [Mayo] 114—ab
opening, failure of migration as cause of imperforate anus, [Bill] 116—ab
prolapse, occurrence in cystic fibrosis of pancreas, [Kulczycki] 1699—ab
surgery, transverse incision in abdominal surgery of, [Trimpi] 2307—ab
tumors, lymphoid polyps, [Holtz] 115—ab
REDDICK, ROBERT H., psychiatrist convicted for licensing naturopaths, etc., 1064
REFLEX
irritability, evaluation of newborn infant, [Apgar & others] *1985
stretch, factor in syncope in healthy young adults, [Dermksian & Lamb] *1200
REFSUM'S SYNDROME: See Ataxia, hereditary
REHABILITATION
A. M. A. Committee on, annual report, 1064
cardiac; cardiologists' opinions, [Williams] 962—ab
community services more practical than a center, [Medicine at Work] 1368
consultation service, recommend A. M. A. approve project and urge implementation, 56
in long-term respiratory paralysis, [Neu] *1610
institute, Kenny Foundation moved in-patient facilities to, Mich., 2157
methods used in whiplash injuries, [Seletz] *1750
New York U. created center for services, 295
plan for national action, Canada, 1922
research, joint efforts of New York U. and Institute for Crippled and Disabled, 1560
service, factors to be considered in planning, [Wallace & Kottke] *2253
training grant to Creighton U., 419
units, expansion sought in state societies, [Medicine at Work] 1368
vocational office, contributions to medical education and research, 1530
Washington, D. C. study links medicine with other groups, [Medicine at Work] 1368
RELIGION
healing by clergymen, United Kingdom, 2171
outpatient pastoral counseling in medical center, [Young & Patrick] *24
unforgivable sin, what is it? (replies) [Liefeld; and original consultant] 228
REPOSITORY, central, of medical credentials, 1070
REPRODUCTION: See Pregnancy; Sterility
RESCINNAMINE: See Rauwolfia serpentina
RESEARCH
A. M. A. Committee on, annual report, 1060
basic and medical, activities of National Science Foundation, 1529
contributions of Office of Vocational Rehabilitation to, 1530
grants by Research Corporation, 2033
grants from Rockefeller Foundation, India, 1681
grants to U. of Mississippi School of Medicine, 1240
highlight of Education Congress, [Medicine at Work] 1899
longitudinal, implications in fitness programs, [McCammon & Sexton] *1440
medical, advancement through Department of Health, Education, and Welfare, 1483
medical, Donner fellowship winners, 78
medical, established by National Fund for Medical Education, 200
medical, National Society for, functions of, 1489
Navy program, 1541
on human factors of aerial warfare, [Stapp] *1744
USPHS grants, (awarded in July and August) 1248; (educational values) 1525; (in metabolic disease) 1915
RESERPINE; RESERPOID: See Rauwolfia serpentina
RESIDENTS AND RESIDENCIES
Air Force training program, 1542
A. M. A. annual report on, 1093
Army program, 1537
compensation of residents in V. A., 1533
Council report on approved residencies, 58
draft status of residents, 1534
limitation of exemption for residents, from payment of dues, A. M. A. resolution on, 66
Naval training programs, 1540
new programs at U. of Washington, 296
number, approved residencies, annual report and directory, Oct. 4, 561; 695—E
pediatric fellowships, 1244
residency aspects of medical education, 1476
Residency Review and Conference Committees, 526
revision of essentials of residency training, annual report, 1093
stipends (maximum) in Selective Service, 1533
U. of Michigan exchange program, 791
urology training, essentials for, annual report, 1099
RESINS
cation exchange, azure A, in tubeless gastric analysis, [Rosenthal & Buscaglia] *409
RESPIRATION
artificial, for rescue work, expired air method, A. M. A. resolution on, 67
artificial, for respiratory insufficiency, France, 432
artificial, mouth-to-mouth method, annual Council report, 1059
basic techniques, conditioning program for asthmatic children, [Scherr & Frankel] *1946
breath tests, legal validity, Canada, 2290
effect of air flow resistance on ventilation and respiratory muscle activity, [Fink & others] *2245
evaluation of newborn infant, [Apgar & others] *1985
factor in syncope in healthy young adults, [Dermksian & Lamb] *1200
hyperventilation syndrome, [Calvo Melendro] 1266—ab
maneuvers without syncope, cardiac arrhythmias in, [Dermksian & Lamb] *1623
manual and mechanical control of ventilation during cyclopropane anesthesia, [Wester & others] *2249
mouth breathing indication for adenoidectomy? 362
regulation, abnormalities, in poliomyelitis, [Plum] 2067—ab
RESPIRATORS
for acute intermittent porphyria with respiratory paralysis, [Doll & others] *1973
patients in, prevent urinary calculi after paralytic poliomyelitis, [Plum] *1302
RESPIRATORY TRACT
acidosis, clinic on recognition and management of, (illustrated film review) [Smart & others] *2054
disease, acute, in Royal Air Force, 1683
disease, fellowships for study in, 912
disease in children, epidemic; effect of influenza immunization on, [Glazier] 460—ab
RESPIRATORY TRACT—Continued
disease, therapy, hazards, [Sherman] *1866
effect of air flow resistance on ventilation and respiratory muscle activity, [Fink & others] *2245
granuloma, giant-cell, [Walton] 1404—ab
house-dust allergy, major clinical entity in pediatrics, [Mande] 1720—ab
infection, acute, treatment in infants, [Nisbet] 2317—ab
infection, repeated bronchoscopy for? 2083
insufficiency, artificial respiration for, France, 432
insufficiency, postoperative, tracheotomy for, [Wassner] 1407—ab
lower, acute virus infections in children and Stevens-Johnson syndrome, [Hölscher] 959—ab
paralysis, acute intermittent porphyria with, [Doll & others] *1973
paralysis, long-term, rehabilitation in, [Neu] *1610
RESTENIL: See Meprobamate
RESUSCITATION: See also Respiration, artificial
successful, in acute myocardial infarction with ventricular fibrillation, [Bloomfield] 330—ab
RETICULOSARCOMA
leukocyte sedimentation rate in, [Bellesia] 2075—ab
RETINA
angiomatosis (Hippel's disease), 11 years after diathermy coagulation, [Vail] 2322—ab
cancer, metastatic, [Kennedy] 1283—ab
chorioretinal burns produced by atomic flash, (guest editorial) [Byrnes] 788—E
detachment, report on, Belgium, 919
hemorrhage, relation to sulfonylureas in diabetes, 2208
RETINITIS
pigmentosa, atypical, in Refsum's syndrome, United Kingdom, 927
pigmentosa, audiometric studies on patients with, [Alberth] 1284—ab
RETIREMENT
American plan, A. M. A. action on, 56
experiments to provide voluntary health insurance after, (Bureau article) [Polner] *194
Jenkins-Keogh Bills: See Jenkins-Keogh Bills
pre-retirement financing or "paid-up" health insurance, annual report, 1116
RETROLENTAL FIBROPLASIA
association with mental defect, [Williams] 2074—b
RETROPERITONEUM
fibrosis, idiopathic; involving ureters, aorta, and inferior vena cava, [Hackett] 1707—ab
Rh FACTOR: See also Hemolytic Disease of Fetus and Newborn
change without previous blood transfusion or previous pregnancy? 1833
desensitize Rh-negative mother with a haptene? 2207
incompatibility, fetal salvage, [Bowman] 339—ab
RHABDOMYOSARCOMA
embryonal, metastatic, in growing skeleton, [Caffey] 123—ab
RHEUMATIC FEVER
Cardiac Complications: See Heart disease (rheumatic); Heart inflammation
chorea and, connection between, France, 91
diagnosis, Norway, 1571
in children, acute, medullary iron in, [Bernheim] 1715—ab
in male, genitourinary focus in, [Domeij] 342—ab
institute for, at Bellevue Medical Center, 2278
prevent by treating streptococcal infections, factors responsible for failures, [Catanzaro] 940—ab
prevent recurrences, United Kingdom, 435
recurrent, prophylaxis with oral phenoxymethyl penicillin, [Kaplan] 1941—ab
treatment, manifestations following cessation of, [Fischel] 1696—ab
RHEUMATISM
exhibit on, award for, 903
International Award AQUI TERME of Rheumatology, 1246
primary, traumatism in pathogenesis of, [Schiavetti] 1576—ab
specific pathogen of, [Zalessky] 967—ab
treatment: cortisone, Sweden, 1394
treatment: Pyracortine, India, 2043
RHINITIS
allergic: See Hay Fever
RHUS
prophylaxis of, 979
RIMIFON: See Isoniazid
RINGWORM
experimentally induced in guinea pigs, griseofulvin for, United Kingdom, 810
scalp, non-inflammatory, effect of oral steroid for, [Kanof] 2318—ab

RISTOCETIN
N. N. D., 183
toxicity, hematologic, relation to dose, [Gangarosa] 1582—ab
treatment of staphylococcic endocarditis, [Weber] *1346
ROCHESTER, N. Y. Health Forum, public relations using television, [Townsend & Steinhausen] *1983
ROCKY MOUNTAIN SPOTTED FEVER
4 cases, Ark., 699
ROENTGEN RAYS
Chest x-rays: See Thorax, chest x-rays
conventional medical films during nuclear warfare, [Nitka] 130—ab
criteria for in differential diagnosis of tuberculomas, [Oliva] 1725—ab
diagnosis of basilar artery insufficiency, [Crawford & others] *509
diagnosis of traumatic aneurysm of thoracic aorta, [Steinberg] 973—ab
first annual Symposium on Cinefluorography, N. Y., 700
"flat film" of abdomen, what does it mean? (reply) [Lamm] 1154—C
sign in hemosiderosis, [Shanbrom & Zheutlin] *33
technicians, schools for, 1546
ROMICIL: See Oleandomycin
ROXINIL: ROXINOID: See Rauwolfia serpentina
ROYAL
Air Force, acute respiratory disease in, 1683
Society of Medicine, Council, Rockefeller grant to, 2296
RUBBER BAND tourniquet for hemostasis in preserving renal function during partial nephrectomy, [Goodwin & Theien] *178
RUBELLA
neutralizing antibody in gamma globulin, re-evaluation of rubella problem, [Krugman] 1281—ab
rubelliform rash, isolate ECHO virus in aseptic meningitis with, [Sultanian] 132—ab
RUBEOLA: See Measles
RUNNING
pyodermia in runners, Sweden, 211
RURAL COMMUNITIES
annual report of Council on Rural Health, 1054
coronary disease in, United Kingdom, 315
health advisors, expanding challenge told by, [Medicine at Work] 776
RUSSIA
American medical exchange program, 201
neurologists' exchange mission to, 2284
new drugs for potentiated anesthesia, [Kazansky] 1824—ab
Russian vaccine for multiple sclerosis, United Kingdom, 311

S

ST. LOUIS UNIVERSITY
research grant in microbiology and virology, 1240
SAINT'S TRIAD
cholelithiasis, hiatus hernia, and diverticulosis coli, [Foster & Knutson] *257
SALAMIDE: See Salicylamide
SALICYLAMIDE
toxicity and antipyretic activity of acetylsalicylic acid compared, (replies) [Woodbury] 1259—C; [Bass] 1684—C
SALICYLATES
problems, [Cann] 1577—ab
SALIVA
excessive, in Parkinsonism, treatment, 138
ptyalism, treatment, 2204
SALIVARY GLANDS
tumor, treatment, 2333
SALK VACCINE: See Poliomyelitis
SALMONELLOSIS
in premature nursery unaccompanied by diarrhea, [Watt] 2316—ab
outbreak in hospital, Denmark, 707
samonella carrier, treatment, 135
unusual Salmonella, [Balows] 1827—ab
SALPINGITIS
acute, prognosis and treatment, [Hedberg] 1162—ab
tuberculous, treatment, [Rydén] 1161—ab
SALT: See also Sodium chloride
Free diet: See Sodium restricted diet
role in fall of blood pressure accompanying reduction in obesity, [Dahl] 322—ab
SANATORIUM: See Tuberculosis of Lung
SANDRIL: See Rauwolfia serpentina
SANGER, F., Nobel Prize winner for Chemistry, United Kingdom, 2296
SANITATION
engineering, India, 1258
environmental, India, 707
SARCOIDOSIS
Boeck's, tuberculosis antibodies in, [Müller] 1288—ab
of spinal cord, remission after cortisone therapy, [Moldover] 2182—ab
SARCOMA
Ewing's relationship of trauma to cause or aggravation of, 135
gastric, Brazil, 1150
Kaposi's, superimposed on erythroderma psoriaticum, [Segal] 465—ab
mammary, [Botham] 714—ab; (Brazil) 802
osteogenic, of jaws and facial bones, [Kragh] 2304—ab
SCALP
ringworm, non-inflammatory, oral steroid for, effect of, [Kanof] 2318—ab
SCHILLING TEST: See Anemia, Pernicious
SCHISTOSOMIASIS
Brazil, 2167
possible, from swimming in ocean, (replies) [Schaefer; and original consultant] 1838
swimmers' itch, treatment, 363
SCHIZOPHRENIC REACTIONS
cerebrospinal fluid neuraminic acid deficiency in, [Bogoch] 1411—ab
SCHOLARSHIPS
allergy, by Allergy Foundation of America, 298
health museum, Ohio, 1141
neuromuscular, from Kenny Foundation, 1561
"performance" awards, 1519
utilization of, 1957-1958, 1518
SCHOOLS
boards, physicians on, W. Va., 911
day, epidemic of tuberculosis of lung in, United Kingdom, 810
driver education in motor vehicle accident prevention, [Neyhart] *2209
for medical record librarians, 1543
for medical record technicians, 1544
for medical technologists, 1544
for occupational therapists, 1545
for physical therapists, 1546
for x-ray technicians, 1546
Health Award to Dr. Bauer, 1663
high, atomic energy demonstration program, 797
of basic sciences, approved in U. S., 1490
of basic sciences, functions and structure of, recommend adoption, reports on, 1089; 1096; 1470
of nursing, accreditation program, report on, 58
personnel, chest x-rays for, 2080
physicians and, national conference on, annual report, 1079
tuberculosis epidemics in, [Mande] 1715—ab
SCHOOLS, MEDICAL: See also specific schools
affiliation, internships by, 523; 524; 553
Alumni: See Graduates
contributions to, annual reports, 1119; 1120
essentials of acceptable school replaced by functions and structures, annual report, 1089
faculty awards, nominations for, 79
faculty positions unfilled in U. S., 1494; 1495; 1548—E
medical practice liaison, 1232
new, first graduates, Colombia, 1391
new, potential sites, annual report, 1090
proposed, agreement on, Ariz., 1139
purpose of, 1548—E
statistics on, education number, Nov. 15, 1459; 1489
studies and accreditation, annual report, 1089
U. S., Chilean visits, 2280
SCIENCE
fair exhibits, awards for, 903; (annual reports) 1051; 1073
writing workshops, annual report on, 1052
SCISSORS, bandage, new, [Burnham] *760
SCLERODERMA
functioning carcinoid syndrome associated with, [Zarafonetis] 940—ab
generalized, long-term prednisone in, [Kanee] 1812—ab
Werner's syndrome, autopsied case, [Perloff] 325—ab
SCLEROSIS
hereditary, spinal form, ACTH or corticosteroids for? 1957
SCLEROSIS, MULTIPLE
alopecia of beard with, 1423
is it a spirochetosis? [Simons] 955—ab
negative bacteriologic and serologic results on reexamination of problem of mycobacterial etiology, [Bauer] 1410—ab
pain in tongue in, treatment, 843
Russian vaccine for, United Kingdom, 311
16 patients, India, 1150
treatment: hydrocortisone and vitamin B$_{12}$, [Reyes Oliveros] 220—ab
SCOLIOSIS: See Spine curvature
"SCRAP IRON" intoxication, [Gadsden & others] *1220
SCROTUM
filariasis of, India, 1682
SCURVY
statistics on, India, 1570
SEAMEN
blood transfusions in Merchant Marine, Netherlands, 2045
SEBORRHEA
pemphigus seborrheicus, [Chargin] 1163—ab
SEDATIVES AND HYPNOTICS
anileridine hydrochloride as, [Therien & others] *2098
from Vinca rosea, hypotensive, India, 1799
promethazine in obstetrics, [Carroll & Moir] *2218
treatment of tetanus, [Miller & Stoelting] *393
SEMEN
bloody, usually found in nonspecific epididymitis? 1833
coloring of, cause, 2207
SEMINAL VESICLES
chronic vesiculoprostatitis: reorientation, [Leader] *995
SENEAR-USHER SYNDROME: See Pemphigus
SENSATION
hyperexcitability of pulmonary endings in asthma, [Tiffeneau] 1588—ab
SEPTICEMIA
of newborn, [Nyhan] 1716—ab
Staphylococcus albus, in mice and men, [Smith] 2179—ab
SERENDIPITY
there's that word again, [Medicine at Work] 1899
SEROMYCIN: See Cycloserine
SEROTONIN (5-hydroxytryptamine)
secreting, functioning carcinoid, diagnosis and clinical management of, [Sauer & others] *139
SERPASIL: Serpiloid: Serpina: See Rauwolfia serpentina
SERUM: See also subheads under Blood
Hepatitis: See Hepatitis, Infectious
horse, desensitization against, 843
stored, laboratory tests with, 1734
SEWELL, MRS. CHARLES W., A. M. A. distinguished service citation to, 53; 1054
SEWER GAS exposure over a period of 2 years, pathologic effects of, 716
SEX
chromatin in cell nucleus after hormones for mammary carcinoma, [Ehlers] 1161—ab
determination, chromatic mass in nuclei of somatic cells, India, 1924
determination, chromosomal, theoretical and practical questions, [Zdansky] 1719—ab
distribution of students and graduates in U. S. and Canada, 1506
genetic, determination, reliability of polymorphonuclear leukocyte morphology, [Cooper] 831—ab
Hormones: See Androgens; Estrogens; Hormones
Intersexuality: See Hermaphroditism
medical students and sexology, United Kingdom, 2048
Precocity: See Puberty
problems in chronic vesiculoprostatitis, a reorientation, [Leader] *995
Society for Scientific Study of Sex, first annual conference, N. Y., 1241
SHELLFISH
allergy to hard-shelled clams, 982
injury due to venomous marine snails of genus Conus, [Kohn] 1702—ab
poisoning, epidemic, (Canada) 431; [Bond] 975—ab
SHIGELLA
drug resistance in, Israel, 95
sonnei dysentery epidemic in general hospital, [Ehrenkranz] 1726—ab
SHIPS
venereal disease treatment at sea, Sweden, 1801
SHOCK
care of patient with multiple injuries, [Aufranc] *2091
in myocardial infarction, drugs for, (Council report) [Selzer & Rytand] *762
septic, nature and treatment, [Altemeier] 2198—ab
traumatic, physiopathology, [Laborit] 840—ab
SIBLINGS: See Families
SICKLEMIA; SICKLING: See Anemia, sickle cell
SIGMAMYCIN: See Signemycin
SIGNEMYCIN
in pediatrics, [Felder] 2318—ab
SILICA exposure after tuberculosis, 2330
SILICOSIS: See Pneumonoconiosis
SILICOTUBERCULOSIS
results of medical and medical-surgical therapy, [Morrow] 2298—ab
"SILO-FILLER'S DISEASE"
chronic, [Schell] 963—ab
SILVER
nitrate vs. oxytetracycline in newborn eyes, incidence of conjunctivitis after, [Mathieu] 121—ab
SIN, unforgivable, what is it? (replies) [Liefeld; and original consultant] 228
SINTROM: See Acenocoumarol
SINUSITIS, Brazil, 1677
SITOSTEROLS
blood cholesterol and difficulty of evaluating decholesterolizing agents, [Levere] 711—ab

SKELETON: See Bones
SKIN
absorption of calories, 1169
changes as result of electric current, [Winer] 2073—ab
coverage in children, lower extremity, [Wynn] *154
Disease (Industrial): See Industrial Dermatoses
disease, National Foundation for Research in Cutaneous Medicine established, 1144
disease, progressive pigmentary, treatment, (replies) [Benedek; and original consultant] 1594
grafts for third degree burns, remove granulations to firm yellow base? 134
hypopigmentation following planing, how can one get an even suntan? 361
in arthroplasty, use of, Finland, 308
Inflammation: See Neurodermatitis
Planing: See Planing
reactions to sulfamethoxypyridazine, [Lindsay] 2073—ab
symposium on human integument, proceedings to be published, 1062
vesicular and bullous disease, treatment, 982
SKULL: See Cranium
SLEEP
position in infant, flattening of one side of head, treatment, 135
position of children, especially lying on stomach, 1592
SMALLPOX
antivaccinal gamma globulin, United Kingdom, 2848
in Pakistan, 1386
osteoarticular lesions in, India, 1255
revaccination contraindicated after generalized vaccinia, 979
vaccination, eczema vaccinatum, [Reynolds] 1716—ab
vaccination, "immune" or "no take" reaction in, 1900—E
vaccination, immunology, mechanism of, 2334
vaccination, Sweden, 1801
SMEGMA, possible role in carcinoma of cervix, [Heins] 2312—ab
SMELL
loss of, after head injury, 1423
SMITH, AUSTIN, JOURNAL editor, resigns, resolution commending him, 2150
SMOKERS; SMOKING: See Tobacco
SNAILS
cone shell stings, [Kohn] 1702—ab
SNAKEBITE
coral snakes, treatment, 1425
treatment, 980
SOCIAL CONDITIONS
biological false-positive serologic tests for syphilis in low socioeconomic group, [Waring & others] *2004
pediatrics in transition due to, [Wheatley] *856
SOCIAL SECURITY
Act, optometrists want amendment to, 2 letters from Dr. Blasingame to Congress regarding, 291, 292
Administration's disability evaluation, 2284
A. M. A. resolution on disability program, 67
bargain or bust, [Marin] 1803—C
coverage for physicians, (A. M. A. resolution on) 65; 66; (report) 1051
for physicians, Ohio poll to be sent to A. M. A., resolution on, 2150
Forand Bill: See Forand Bill
missiles or pensions, (Miscellany) [Orr] *1686
state participation in federal insurance contribution act, A. M. A. resolution on, 64
SOCIALISM
health services reviewed, New Zealand, 1570
welfare state down under, (Miscellany) [Hotchkiss] 933
SOCIETIES, MEDICAL: See also list of Societies at end of letter S
American Association of Poison Control Centers formed, 2159
American Hospital Association dedicated new headquarters, 298
American Psychiatric Association dedicates office building, 2160
Bockus International Society of Gastroenterology organized by graduate alumni of U. of Pennsylvania, 1560
Boston Psychoanalytic Society and Institute, 25th anniversary, 2157
conference calls for action in aging, [Medicine at Work] 769; 779—E
constituent, resolution on listing by A. M. A., 71
county, civil defense conference, (program) 906; (annual report on) 1071; (highlights) [Medicine at Work] 1897
Dane County Medical Society co-sponsors symposium on bone, (Program) 520
establish sovereignty of relationships with osteopaths, disappprove resolution on, 2150
local, participation in by physicians in federal service, 58; 1069
SOCIETIES, MEDICAL—Continued
local, planning for indigent care is obligation, [Medicine at Work] 1893
Medical Society of New York moved offices, 419
national associations and A. M. A., joint meetings, resolution on, 68
offer prizes to teenagers for high scholarship, [Medicine at Work] 1891
Oregon Trudeau Society organized, 2159
responsibility in veterans medical care, annual report, 1103
Society for Scientific Study of Sex, first annual conference, N. Y., 1241
Southern Medical Association opens new headquarters, (photo) 1668
state committees on industrial health, joint conference with, annual report on, 1066
state, Conference of Mental Health Representatives, (how contagious is mental illness?) [Medicine at Work] 773; (annual report) 1053
state, expansion of rehabilitation units sought in, [Medicine at Work] 1368
state, traffic safety committees, objectives for, [Rodger] *2215
state, use of official stamp by A. M. A., resolution on, 71
suggested guides for committees on aging approved, 59; 1102
suggested guides for voluntary prepayment plans sponsored by, action on, 59; 1116
2 in Minnesota aim at home care for chronically ill, [Medicine at Work] 1894
SOCIETY for Relief of Families of Deceased, Disabled and Indigent Members of Medical Profession of South Carolina created, [Smith] 1684—C
SOCIOLOGY of Medical Education, introductory studies in, 1467
SODIUM
Chloride: See also Salt
chloride plombage to prevent complaints after lumbar puncture, [Harrer] 1712—ab
dietary, role in essential hypertension, [Dahl] 323—ab
phosphate, tribasic, contaminant in needles and syringes used for spinal anesthesia, [Joseph & Denson] *1330
restricted diet, booklets, annual report, 1059
restricted diets, physiological adaptation and clinical usefulness, (Council report) [Danowski] *1886
SOLUSEPTASINE
effect on blood sugar, India, 1257
SOUTHERN Regional Education Board and medical education, 1487
SOVIET UNION: See Russia
SPACE
address on conquest of, Pa., 199
Medicine: See Aviation
national program, annual report of Council on National Defense, 1071
SPASM
training center for spastics, United Kingdom, 2175
SPEAKERS bureau, Chicago Medical School organizes, 294
SPECIALTIES
American boards, requirements for certification, annual report, 658
approved residencies and fellowships according to, 527; 561; 694—E
highlight of Education Congress, [Medicine at Work] 1899
new "doctor-draft" legislation provides for, 1535
SPEECH
changes in intoxication, (Committee report) [Bogen] 48
personality characteristics relationship, U. of Cincinnati study, 1560
SPERMATOZOA
cytometer chamber spermatocidal test, improved technique, [Berberian & Slighter] *2257
human, succinic dehydrogenase in, India, 94
SPHINCTER MUSCLES
gastroesophageal, jejunal interposition operation, [Thomas & Merendino] *1759
SPINAL CORD
injuries, neurosurgical care of severely injured patient, [Odom] *2087
sarcoidosis: cortisone for, [Moldover] 2182—ab
SPINAL FLUID: See Cerebrospinal Fluid
SPINAL PUNCTURE
headache, technique to avoid, [Brocker] *261; (correction) 913
lumbar, sodium chloride plombage to prevent complaints after, [Harrer] 1712—ab
SPINE
arthritis, treatment, 843
cervical, rheumatoid arthritis in adult, [Sharp] 2303—ab
curvature, kyphoscoliosis and pregnancy, [Marchand] 2314—ab
curvature, Milwaukee brace in operative treatment of scoliosis, [Blount] 327—ab
SPINE—Continued
curvature, treatment of scoliosis, follow-up, [Risser] 328—ab
pathogenetic importance of thoracic portion, [Kamieth] 1586—ab
SPIRAMYCIN
treatment of chronic osteomyelitis, [Marchis] 126—ab
treatment of experimental toxoplasmosis, [Garin] 835—ab
SPIROCHETOSIS
is multiple sclerosis? [Simons] 955—ab
SPLEEN
primary splenic pancytopenia, effect of splenectomy on, [Tapie] 2188—ab
radiologic sign in hemosiderosis, [Shanbrom & Zheutlin] *33
role of, and effect of splenectomy in sickle cell disease, [Sprague] 224—ab
rupture in infant during delivery, hematologic study during convalescence, [Hottinger] 461—ab
splenoportography, advantages and disadvantages, [Figley] 973—ab
SPLENECTOMY: See also under Spleen
for leishmaniasis, India, 1798
life span after, 1837
SPLENOMEGALY
hepatosplenomegaly in children, Brazil, 1254
postmalarial, India, 1680
SPONGE
gauze smear technique in esophageal cytology, [Hershenson & others] *1871
SPONTIN: See Ristocetin
SPORTS: See Athletics; and under specific sports, as Boxing
SPUTUM
viscosity, reduction by desoxyribonuclease and chymotrypsin, United Kingdom, 2173
STALVEY, RICHARD, leaves A. M. A. to be Assistant Executive Director of Los Angeles County Medical Association, 695
STAMPS: See Postage Stamps
STANFORD UNIVERSITY SCHOOL OF MEDICINE
first Bloomfield Professor of Medicine, 2155
new genetics department at, 197
STAPHYLOCOCCUS
albus septicemia in mice and men, [Smith] 2179—ab
antibiotic resistant familial infections caused by exposure of babies in hospital nurseries, [Hurst] 1826—ab
antibiotic-resistant, outbreaks in medical and surgical ward, [Barber] 945—ab
aureus, importance in pneumonia in influenza epidemic, [Robertson] 1585—ab
aureus, nasal carriage by nurses, [Thompson] 969—ab
aureus, pulmonary, eventually lethal after Asian influenza, treatment, [Moeschlin] 1158—ab
disease, regional conference on control, Colo., 1557
empyema, [Magovern & Blades] *365; (in children) [Sia] 1412—ab
endocarditis treated with ristocetin, [Weber] *1346
enteritis and antibiotics, Sweden, 1395
furunculosis, chronic, recurrent, 842
infection, maternal breast abscesses and antecedent neonatal sepsis, [Monro] 1275—ab
infections, bacteriophage treatment, 1423
infections in nursery, prevention of, 2204
infections, isolation of patients with, 716; (replies) [Rolf; and original consultant] 2208
meningitis, novobiocin for, [Giusti] 337—ab
penicillin-resistant, Denmark, 919
pneumonia in infancy and childhood, (75 cases) [Hendren & Haggerty] *6; (cortisone for) [Bühler] 222—ab
STARCH tolerance test, clinical evaluation, [Nugent & Millhon] *2260
STATES
activities and gifts of American Medical Education Foundation, 1119, 1120
financing of medical care for indigent in 1958, (Council report) 2151
governments, council of, annual report on, 1103
internships by, 523; 524
legislative keyman organization, annual report, 1048
licensing boards, foreign physicians licensed by, 167:622, May 31, 1958; (correction) 168:2161, Dec. 20, 1958
participation in Federal Insurance Contribution Act, A. M. A. resolution on, 64
populations, ratio of first-year students to, 1510
state operated diagnostic center, Canada, 431
STATISTICS: See also Vital Statistics
postdoctoral study in at U. of Chicago, 297
STEIN-LEVENTHAL SYNDROME
curable form of sterility, [Stein] 1714—ab
STERANE: See Prednisolone acetate

STERILITY, SEXUAL
curable form: Stein-Leventhal syndrome, [Stein] 1714—ab
endocervicitis and, Brazil, 802
in male, retrograde ejaculation as cause of, [Schellen] 1578—ab
in primary failure of anterior pituitary, cobalt radiation of value? 1732
infertility and, medical views, [Cohen] *1963
serum cholesterol level and, 980
surgical management of tubal factor, [Cauwet] *991
STERILIZATION, BACTERIAL
heat, of local anesthetics a necessity? [Bridenbaugh & Moore] *1334
of electric clippers and barber's tools, 362
STERILIZATION, SEXUAL
therapeutic, and testosterone propionate for breast cancer, [Noguès] 713—ab
STEROIDS: See Corticosteroid Hormones; and specific steroids as Cortisone
STEROSAN: See Chlorquinaldol
STEVENS—JOHNSON SYNDROME: See Erythema multiforme
STILBESTROL: See Diethylstilbestrol
STILLBIRTH
fetal salvage in Rh incompatability where previous stillbirths have occurred, [Bowman] 339—ab
STIPENDS: See Wages
STOKES-Adams Syndrome: See Heart block
STOMACH
analysis, tubeless, (India) 210; [Rosenthal & Buscaglia] *409
cancer after resection for ulcer, [DeBray] 825—ab; [Cote] 1160—ab
cancer in Hiroshima, [Murphy] 469—ab
cancer, prognosis, [Denck] 1408—ab
cancer, study, N. Y., 2158
cancer, treatment, end-results, [McNeer] 331—ab
cardiomyectomy: surgery of cardiospasm according to Heller, [Schmidt] 448—ab
exfoliative cytology, Brazil, 1254
gastroesophageal mechanism, experimental studies, [Meiss] 1290—ab
granulomatous disease, nonspecific, [Goldgraber] 819—ab
inflammation, severe chronic, surgical treatment, [Judd] 111—ab
lower esophageal ring, pathology, [MacMahon] 968—ab
moniliasis, [Tinajero Ayala] 940—ab
perforation, idiopathic, in newborn, [Castleton] 111—ab
sleeping positions of children, 1592
Surgery: See also Peptic Ulcer; and other subheads under Stomach
surgery, anemia after subtotal gastrectomy, [van Geertruyden] 217—ab
surgery, dumping syndrome after, 1229—E
surgery, gastrectomy, drainage after, 716
surgery, Paflium after, Sweden, 708
surgery, partial gastrectomy; hyperdiastasuria and acute pancreatitis after, [Wallensten] 1708—ab
surgery, resection and pulmonary tuberculosis, [Neubert] 2306—ab
surgery, total gastrectomy technique, Portugal, 310
tumors, hemangioendothelioma of, [Andreassen] 825—ab
tumors, leiomyosarcoma of, [Mason] 2183—ab
tumors, sarcoma, Brazil, 1150
Ulcer: See Peptic Ulcer
STONES, precious, [Leisure Corner] 1261
STORAGE
of liquid plasma, safety after, [Sayman & others] *1735; 1784—E
STREPTOCOCCUS
infection, penicillin for, compare oral and parenteral forms, [Breese] 1283—ab
infections, epidemic, mass prophylaxis with benzathine penicillin G, [Schreier] 354—ab; [McFarland] 714—ab
infections, treatment to prevent rheumatic fever, factors responsible for failure, [Catanzaro] 940—ab
STREPTOKINASE
buccally, clinical and experimental observations, [Innerfield] 124—ab
STREPTOMYCIN
Dihydro—: See Dihydrostreptomycin
sensitivity of mycobacteria isolated from untreated primary tuberculosis of lung to, [Spina] 1945—ab
toxicity; dermatitis in nurses, [Wilson] 465—ab
toxicity, hazards, [Herrell] *1875
treatment alone or plus isoniazid in tuberculous meningitis, [Giova] 440—ab
treatment plus ethereal oils in specific pulmonary diseases, [Liener] 468—ab
treatment plus PAS and isoniazid in urogenital tuberculosis, [Hansson] 1720—ab
STREPTOVARICIN
in tuberculous guinea pig, [Stern] 837—ab
STRESS
isolation, in medical and mental illness, [Ziskind] *1427
STROKES: See under Brain
STRONGYLOIDIASIS
overwhelming, [Brown & Perna] *1648
treatment, Brazil, 802
treatment: new drugs, [Asfora] 1703—ab
STRYCHNINE
pharmacological activity, India, 806
STUDENTS, MEDICAL
allergy awards to, 298
education numb r, Nov. 15, p. 1459; 1503
medicolegal program, annual report on, 1044
Minnesota Multiphasic Personality Inventory and, New Zealand, 433
senior, as clinical clerks to replace first year interns, (A. M. A. resolutions on) 65; (report) 1088
sexology and, United Kingdom, 2048
Sheard-Sanford prizes for research by, 1143
Student A. M. A. award exhibits, 905; 1073
USPHS program; Commissioned Officer Student Training and Extern Program, 425
SUBDURAL Hematoma: See Meninges
SUGAR: See also Blood sugar; Glycosuria
cane sensitivity, information on bagassosis due to, 134
SUICIDE
poisoning, [Norbury] 1712—ab
prevention, iproniazid for depression and melancholia, toxicity of, 50—E; (reply) [Robie] 1802—C
SULFADIMIDIN: See Sulfamethazine
SULFAMETHAZINE
treatment plus neomycin in infant diarrhea, India, 1256
SULFAMETHOXYPRIDAZINE
Acetyl: See Acetyl Sulfamethoxyprydiazine
long-acting, India, 1799
N. C. D., 1771
toxicity: cutaneous reactions, [Lindsay] 2073—ab
SULFONAMIDES
Antidiabetic: Hypoglycemic: See also Sulfonylureas
effect of Solusептasine on blood sugar, India, 1257
hypoglycemic, show selective tropism for pancreas, France, 803
long-acting: Orisul, clinical experiences with, [Esseltier] 1722—ab
long-acting: sulfamethoxypridazine, India, 1799
toxicity: myocarditis, Canada, 1922
SULFONYLUREAS (carbutamide; chlorpropamide; tolbutamide)
carbutamide treatment of psychiatric patients, Sweden, 211
treatment of diabetes, (Finland) 308; (chlorpropamide, United Kingdom) 1574; [Murray] 2074—ab; [Hofstetter] 1722—ab; [Ikkala] 2196—ab; (retinal hemorrhage relation to) 2208
SULFURIC ACID
tanks, arsine poisoning from cleaning of, United Kingdom, 311
SUNTAN
how can one get an even one after planing with residual hypopigmentation? 361
vitamin D, and calcium absorption, 1953
SUPRARENALS: See Adrenals
SURGEONS
American, visit Oslo, Norway, 310
fee, when visiting surgeon does the surgery, Canada, 431
spinal anesthesia from standpoint of, [Scarborough] *1324
thoracic team tours South America, Sweden, 1800
SURGERY
cardiac arrest in, problem of, [McCarthy] *2101
diagnosis and management of hepatic coma in surgical patients, [Najarian] 950—ab
ethical to have another perform without patient's knowledge and consent? (Judicial Council opinion on) 1556
hemorrhage, control with adrenochrome monosemicarbazone, [Cainan] 1160—ab
infections, control, [Hitchcock] 2066—ab
major, cortisone as cover for, in advanced pulmonary tuberculosis, [Edge] 2185—ab
miniature R-wave cardiac monitor to detect cardiac arrest during, [Veling] *753
operating room mortality, develop classification and terminology for, A. M. A. resolution on, 67
operating room training of student nurses, A. M. A. resolution on, 68
operating time, Germany, 1679
oral bouillon feedings, [Benjamin] 2311—ab
Postoperative: See also under specific organs, regions or operations
postoperative hiccup, Belgium, 2280
postoperative myocardial infarction, [Feruglio] 2059—ab
postoperative period (immediate) following total body perfusion, [Matthews] 1708—ab
postoperative respiratory insufficiency, tracheotomy for, [Wassner] 1407—ab
Preoperative: See also under specific organs, regions or operations
SURGERY—Continued
preoperative and postoperative use of anileridine hydrochloride as analgesic and sedative, [Therien & others] *2098
principles in management of mass casualties, [Ziperman] 453—ab
thoracic and thoracoabdominal, hypothermia in poor risk patients, [Brewer] 1588—ab
tissue committee, uses and abuses, [Henley & others] *2243
wound infection, United Kingdom, 925
SWEAT
bromhidrosis, etiology, 1592
excessive underarm, treatment, (replies) [Berberian; and original consultant] 363
recurrent night, cause, treatment, 863 (replies) [Robinson; Weinberg] 2208
SWEETENERS
artificial, prolonged use harmful? 1593
SWIMMING
swimmers' itch and possible schistosomiasis from ocean, (replies) [Schaefer; and original consultant] 1838
swimmers' itch, treatment, 363
SYDENSTRICKER, VIRGIL P., Goldberger award to, 53
SYMPATHECTOMY
lumbar, effective level determined by electrical stimulation at operation, [Randall] 444—ab
SYMPOSIUM
on competitive athletics in children, [Maksim] *1431; [Hein] *1434; [Hoxie] *1439; [McCammon & Sexton] *1440
on drug therapy, sponsorship, annual report on, 1057
on formation and diseases of bone, (program) (Council article) 520
on nutrition in pregnancy, (Council articles) [Stearns] *1655; [Hepner] *1774; [Warkany] *2020; [McGanity & others] *2138; [Macy] *2265
on occupational medicine for private practitioner, [Johnstone] *1844; [Belknap] *1847; [Keene] *1851; [Felton] *1854; [Kirkpatrick] *1864
panel discussion on use and abuse of adrenal steroids, program, (A. M. A. symposium) 41
SYNCOPE
congenital deaf-mutism with prolonged QT interval and, sudden death in, [Levine] 1818—ab
experimental, cardiac arrythmias in, [Dermksian & Lamb] *1623
in healthy young adults: incidence, mechanisms, significance, [Dermksian & Lamb] *1200
SYPHILIS: See also Neurosyphilis
early, long-term results of treatment, [Chargin] 1163—ab
serodiagnosis, compulsory premarital testing, epidemiologic study, 289—E
serologic tests, biological false-positive results in low socioeconomic population group, [Waring & others] *2004
tertiary, and yaws, method of differentiating, 2265
training in, plea for, [Thomas] 812—C
SYRINGE
used for spinal anesthesia, effects of detergents left as contaminants in, [Joseph & Denson] *1330

SOCIETIES AND OTHER ORGANIZATIONS

Acad.—Academy
Am.—American
A.—Association
Coll.—College
Commn.—Commission
Comm.—Committee
Conf.—Conference
Cong.—Congress
Dist.—District
Div.—Division
Found.—Foundation
Hosp.—Hospital
Indust.—Industrial
Inst.—Institute
Internat.—International
M.—Medical
Med.—Medicine
Nat.—National
Pharm.—Pharmaceutical
Phys.—Physicians
Soc.—Society
Surg.—Surgery
Surgs.—Surgeons
S.—Surgical

Note:—For items on societies not found in the Medical News Section, see alphabetical listing in Index.

Aberdeen Area M., Dental and Pharmacy Officers A., 2157
Acad. of Psychoanalysis, 1562, 1914
of Psychosomatic Med., 299, 2282
Alabama Acad. of General Practice, 1665
M. Alumni A. of, 1665
Alleghany County Health Department, 2156
Allergy Found. of America, 298
Allstate Safety Crusade, 76
Am. Acad. of Dermatology and Syphilology, 1563
Acad. of General Practice, 74, 77, 297, 419, 420, 699, 792, 794, 912, 1139, 1142, 2032
Acad. of General Practice, Commn. on Education of, 418, 2156
Acad. of General Practice, Iowa Chapter, 294

Societies and Other Organizations—Continued
Am.—Continued
Acad. of General Practice, Montana Chapter, 1559
Acad. of General Practice, Nevada Chapter, 1559
Acad. of General Practice, North Dakota Chapter, 1242
Acad. of General Practice, South Carolina Chapter, 1243
Acad. of General Practice, South Dakota Chapter, 199
Acad. of General Practice, Virginia Chapter, 296
Acad. of General Practice, West Virginia Chapter, 297, 1912
Acad. of Neurology, 1142
Acad. of Opthalmology and Otolaryngology, 702, 1669
Acad. of Orthopaedic Surgs., 2280
Acad. of Pediatrics, 422, 911, 912, 1244, 2282
Acad. of Physical Med. and Rehabilitation, 1244
A. for the Advancement of Science, 1557
A. for Blood Banks, 1561
A. for the History of Med., 200
A. of Hosp. Accountants, 298
A. of M. Clinics, 1383
A. of M. Record Librarians, 298
A. of Poison Control Centers, 2159
A. of Public Health Phys., 1142
A. for the Study of Neoplastic Diseases, 1563
A. for the Surg. of Trauma, 422, 2159
A. of University Women, 1668
Board of Anesthesiology, 1383
Board of Internal Med., 201, 293, 417, 913
Board of Pediatrics, 911
Board of Psychiatry and Neurology, 1142, 1787
Board of Radiology, 2279
Board of Surg., 2031
Cancer Soc., 198, 1140, 1243
Cancer Soc., Florida Div. of, 1385
Cancer Soc., Massachusetts Div., 1240
Cancer Soc., Milwaukee Chapter, 1789
Coll. of Allergists, 1139
Coll. of Cardiology, 1385
Coll. of Chest Phys., 200, 298, 1143, 1241, 1790
Coll. of Gastroenterology, 1563
Coll. of Hosp. Administrators, 298
Coll. of Phys., 293, 419, 1381
Coll. of Phys., Arizona Region, 790
Coll. of Phys., Arkansas-Oklahoma Region, 795
Coll. of Phys., Idaho-Utah Region, 293
Coll. of Phys., Kentucky-Tennessee Region, 795
Coll. of Phys., Midwest Region, 300
Coll. of Phys., New England States, Quebec, and Atlantic Provinces, 1244
Coll. of Phys., New Jersey, 1240
Coll. of Phys., New Mexico, 700
Coll. of Phys., Ohio Region, 1911
Coll. of Phys., Puerto Rico Region, 2031
Coll. of Phys., Southeastern Region, 422
Coll. of Phys., West Virginia Region, 296
Coll. of Preventive Med., 911, 1668
Coll. of Radiology, 2028, 2282
Coll. of Surgs., 295, 703, 2031, 2281, 2282
Coll. of Surgs., West Virginia Chapter, 297
Cyanamid Company, Lederle Laboratories Div., 79
Diabetes A., 793
Diabetes A., Council of, 297
Dietetic A., 793
Electroencephalographic Soc., 78
Federation for Clinical Research, 2279
Found. for Tropical Med., 1241
Fracture A., 77
Friends Service Comm., 201
Gastroenterological A., 299, 1560
Goiter A., 1562
Heart A., 298, 420, 912, 1242, 1382, 1557, 1788
Hosp. A., 298, 1558
Hungarian M. A., 1241
Inst. of Electrical Engineers, 201
Inst. of Physics, 1383
Inst. of Ultrasonics in Med., 2282
Laryngological A., 78
M. A., 75, 201, 418, 702, 791, 909, 1141, 1143, 1144, 1558, 1667, 1669, 1910, 2029, 2032, 2033
M. A., Comm. on M. Aspects of Automobile Injuries and Deaths, 76
M. A., Council of Indust. Health, 197
M. A., Council on Mental Health, 293
M. A., House of Delegates, 1382
M. Writers' A., 78, 1140, 1141, 1562, 1669
M. Writers' A., Delaware Valley Chapter, 1561
Medicine's "Festival of Faith", 417
Medico-Psychological A., 2160
Nat. Red Cross, 1144
Neurological A., 1142
Pediatric Soc., 201, 1911
Physiological Soc., 1557
Physiology Soc., 2030
Proctologic Soc., 78
Am.—Continued
Psychiatric A., 293, 418, 1239, 2033, 2160, 2278, 2282
Psychiatric A., Comm. on Cooperation with Leisure Time Agencies, 298
Public Health A., 794, 1239
Recreation Soc., 298
Rheumatism A., 1562
Rhinologic Soc., 703
Rocket Soc., Holloman Section, 1910
Roentgen Ray Soc., 422, 1239, 1561
Soc. of Anesthesiologists, 795
Soc. for Artificial Internal Organs, 1557
Soc. of Clinical Pathologists, 1143, 1145, 1558, 2157
Soc. of Internal Med., Legislative Comm. of, 1911
Soc. of Maxillofacial Surgs., 1245
Soc. of Plastic and Reconstructive Surg., 423
Soc. of Safety Engineers, 422
Soc. for the Study of Arteriosclerosis, 912, 2159
Soc. of Tropical Med. and Hygiene, 790, 1244
Speech and Hearing A., 1563
S. A., 295
Therapeutic Soc., 200
Trudeau Soc., 912, 1241
Arizona M. A., 1139
Arkansas Conf. of Tuberculosis Workers, 2155
M. Soc., 417
State Board of Health, 699
Armed Forces Inst. of Pathology, 2279
Army Ballistics Missile Agency, Development Operations Div., 199
Arthritis and Rheumatism Found., 79
and Rheumatism Found., New England Chapter, 421
Associated Jewish Charities of Baltimore, 1140
A. for the Advancement of Psychoanalysis, 2030
of Am. M. Colleges, 201, 294, 1560, 1789, 2029
of Clinical Scientists, 205
of M. Illustrators, 702
of M. Record Consultants, 2033
of M. Superintendents of Am. Institutions for the Insane, 2160
of Military Surgs. of the United States, 1144, 2277
of Surgs. of Great Britain and Ireland, 296
for Research in Ophthalmology, Southern Section, 1143
Atlanta Tuberculosis A., 790
Atomic Energy Commn., 1563, 1666
Energy Research Establishment of Harwell, England, 1668
Bahamas M. Conf., 1669
S. Conf., 1790
Bailey, Mary, Found., 1789
Barker Welfare Found., 298
Beatty, Chester, Research Inst., 1245
Bennett, A. E., Neuropsychiatric Research Found., 200
Bergen County Tuberculosis and Health A. of New Jersey, 2039
Berks County M. Soc., 1562
Bexar County M. Soc., 1383
Biochemistry Research Inst., Buenos Aires, Argentina, 2033
Board of Psychiatry and Neurology, 1140
Bockus Internat. Soc. of Gastroenterology, 1560
Boston Psychoanalytic Soc. and Inst., 2157
British Inst. for the Study and Treatment of Delinquency, 1239
Soc. of Gastroenterology, 296
Brooklyn Acad. of Arts and Sciences, 1382
Acad. of Music, 1382
Doctors' Symphony, 2158
Broome County M. Soc., 420
Cabell County M. Soc., 76
California Acad. of General Practice, 417
Department of Public Health, 790, 1380
Heart A., 2277
Southern, Psychiatric Soc., 293
Canada, Board of Commissioners, 2282
Canadian Arthritis and Rheumatism Soc, 2281
Cancer Soc., Saskatchewan Div., 1914
M. A., 1141
Soc. for the Study of Fertility, 913
Cancer Chemotherapy Nat. Service Center, 911, 1909
Cardiovascular Research Inst., 1380
Central Neuropsychiatric A., 795, 2281
Chicago A. of Commerce and Industry, 1381
Gynecological Soc., 294
Hearing Soc., 204
Heart A., 1381
Home for Incurables, 197
Inst. of Med. of, 198, 908
Inst. for Psychoanalysis, 198
Laryngological and Otological Soc., 294
M. Center District, 198
Psychoanalytic Soc., 198
Rehabilitation Inst., of, 198
Soc. of Allergy, 1140
Soc. of Internal Med., 1140
Soc. of M. History of, 2029
Children's Cancer Research Found., Inc., 911
Chile, Nat. Health Service of, 2280
Chronic Disease Research Inst., 1559
Ciba Found., London, England, 77
Cleveland, Acad. of Med. of, 1141
Clinic Found., 78, 1242, 2281
Health Museum, 1141
Soc. of Internal Med., Comm. on Insurance Plans, 1911
Clinical Orthopaedic Soc., 422, 2282
Coll. of Am. Pathologists, 1145, 2157
Colorado State Department of Public Health, 1557, 1665
State M. Soc., 293, 1909
Commonwealth Fund of New York, 421, 1789
Communicable Disease Center, Atlanta, Ga., 1557, 1562, 1913
Conf. on Athletic Injuries, 77
of Electrical Techniques in Med. and Biology, 201
on Schizophrenia and the Family, 701
on Tuberculosis, 1559
Congenital Child Amputee Conf. and Clinic, 700
Connecticut State M. Soc., 1380
Dearborn Chamber of Commerce, 2278
Public Health Comm., 2278
Delaware County M. Soc., 1242
Denver Department of Health and Hospitals, 1557
Detroit, Health Federation, United Community Services of, 2278
Mens Council Navy League of the U. S., 2278
Rehabilitation Inst. of Metropolitan, 2157
Diabetes Week, 297
District of Columbia, M. Soc. of, 1380
Doctors' Orchestral Soc. of New York, 2158
Donner Found. of Philadelphia, 78, 1665
Easter Seal Research Found., 80
Eastern Panhandle M. Soc., 296
Psychiatric Research A., 911
Education Found., Inc., 2031
Erie County M. Soc., 1141
Federal Bureau of Investigation, 1384, 2160
Safety Conf., 422
Safety Council, 422
Federation of Jewish Philanthropies, 2279
Fiske, Caleb, Fund, 77
Florida M. A., 1385
State Board of Health, 699, 1385
Flying Phys. A., 1143
Food and Drug Administration, 1245
Ford Found., 2279
Friends M. Soc., 201
Gairdner Found., 2281
Gastroenterology Research Group, 1384
Georgetown University M. Alumni A., 1380
Georgia Warm Springs Found., 1667
Gerontological Research Found., 1145
Soc., 1144
Grady Hosp. Clinical Soc., 418
Grant Found., 2160
Guild of Prescription Opticians of America, Inc., Ophthalmology Scholarship Fund, 298
Haiti, Republic of, Nat. Order of Merit and Honor, 1789
Hanna Fund, 2157
Hartford, John A., Found., 1243, 1787
Harvey Soc., 1560
Hawaii Cancer Soc., 1141
Health Insurance Council, New York City, 1911
Heart Fund, 298
Heart-in-Industry Conf., 1381
Heinz Research Center, 793
Hematology Research Found., 794
Hillsborough County M. A., 1385
Hosp. Research and Educational Trust, 1243
Household Finance Corporation, 1790
Houston Ophthalmological and Otolaryngological Soc., 2281
Idaho Soc. of Internal Med., 293
Illinois Acad. of General Practice, 1239
Central, Soc. of Ophthalmology and Otolaryngology, 197
Comm. for Handicapped Children, Advisory Comm. on Hearing Conservation and Rehabilitation of, 294
Department of Public Welfare, 790, 1139
Governor's Comm. on Employment of the Physically Handicapped, 1381
Hosp. A., 298
Psychiatric Soc., 1239
Soc. of Anesthesiologists, 418, 1239
State M. Soc., 1909, 2156
State Psychiatric Inst., 1139
Tuberculosis A., 293
Indiana State M. A., 791
Inst. for Advancement of M. Communications, 78
of Andean Biology in Morococha, 299
for the Crippled and Disabled, 1560
for Juvenile Research, 1139
of Mental Health, 1142
of Microbiology Polio Laboratory, 1562
Nutrition of Central America and Panama, 793
of Nutrition Sciences, 793
of Orthopedics, Royal Nat. Orthopedic Hosp., in London, England, 2158
Pasteur, Paris, France, 2033
on Perinatal Casualties, 1910
of Radio Engineers, 201
Instrument Soc. of America, 201

Societies and Other Organizations—Continued
Internat. Children's Emergency Fund, 793
Coll. of Surgs., 418, 1244, 1787
Coll. of Surgs., Northeastern Section, 700
Coll. of Surgs., U. S., Section, 912
Coll. of Surgs., U. S. Section, Southeastern Region, 2032
Cong. of Gastroenterologists, 1560
Cong. of Microbiology, 201
Cooperation Administration of the U. S. State Department, 793, 1241, 1561
Cooperation Administration, Health Div. for, 1559
Labor Organization, 2282
Soc. for Clinical and Experimental Hypnosis, 1145
Symposium on Cardiovascular Diseases, 1564
Symposium on the Status of Tuberculosis, 793
Symposium on Tuberculosis, 1144
Interstate Postgraduate M. A., 1385
Iowa, State University of, Alumni A., 294
Irvington House Inst. for Rheumatic Fever and Allied Diseases, 2278
House M. Advisory Comm., 2279
Italian Soc. of Rheumatology, 1246
Italy, Republic of, Order of Merit, 418
Jefferson County Acad. of General Practice, 1910
County M. Soc., 1911
County Mental Health A., 1911
Jersey City M. Center Alumni A., 910
Jesuit Research Council of America, 1910
Johnson Found., 2279
Kaiser-Wilhelm Inst. for M. Research, Heidelberg, Germany, 1560
Kansas City, Health Div., 198
Soc. of Pathologists, 1558
Kellogg, W. K., Found., 1240, 2280
Kenny, Sister Elizabeth, Found., 1561, 2157
Kentucky Acad. of General Practice, 909
State M. A., 198, 1381
Kessler Inst. for Rehabilitation, 700
King County M. Soc., 911
Kings County M. Soc., 1382
Kresge Found., 1382
Laird Found., 2031
Lake County Health Department, 2156
Lancaster County M. Soc., 1243
Langer, Ann, Cancer Research Found., 2280
Lead Hygiene Conf., 1244
Industries A., 1244
Leukemia Soc., Inc., 1561
Liberian Inst., 1241
Life Insurance M. Research Found., 1142
Los Angeles County Heart A., 2277
Obstetrical and Gynecological Soc., Inc., 908
Radiological Soc., 908
Louisiana, Southwest, Graduate M. Assembly, 74
Lovelace Found., 1382, 1910, 2031
McGregor Fund., 1381
Machinery Dealers Nat. A., Philadelphia Chapter, 1789
Macy, Josiah, Jr., Found., 299
Maine Hosp. A., 1910
M. A., 1910
Tuberculosis A., 1909
March of Dimes, 1383
Maryland Acad. of General Practice, 699
Massachusetts M. Soc., 1142, 1910
May Inst. for M. Research, 1242
Mayo Found., 1559, 2157
Found., Alumni A. of, 1788
M. Seminar for Lawyers, 296
Menninger Found., 78
Merck & Company, Inc., 75
Merrell, William S., Company, 75
Metropolitan Life Insurance Company, 77, 80, 299, 1665, 2159
Michigan Acad. of General Practice, 1140
Allergy Soc., 1790
Department of Health, 419, 911, 1558, 2030, 2156
Heart A., 1381, 2278
Soc. of Neurology and Psychiatry, 1910
State M. Soc., 74, 1140, 1558
United Fund, 2157
Western, Pediatric Soc., 1240
Midwest Forum on Allergy, 1790
Military Medico-Dental Symposium on Space Med., 199
Milwaukee Acad. of Med., 1913
Ministry of Health, Standing M. Advisory Comm., 294
Minnesota Acad. of Science, 2157
State Board of Health, 2157
State M. A., 702, 2282
Mississippi Heart A., 1240
Soc. of Anesthesiologists, 1240
State Board of Health, 1240
Valley Conf. on Tuberculosis, 795
Valley M. Soc., 1788
Valley Trudeau Soc., 795
Montana State M. A., 75, 791
Montreal, University of, Inst. of Experimental Med. and Surg., 75
Muscular Dystrophy A. of America, Inc., 1239
Nat. Acad. of Sciences-Nat. Research Council, 78, 197, 1245, 1560
Acad. of Sciences-Nat. Research Council, Comm. on Radiology, 79
Nat.—Continued
Advisory Arthritis and Metabolic Disease Council, 75
Advisory Cancer Council, 1665
Advisory Heart Council, 1559
Advisory Neurological Diseases and Blindness Council, 1557
Board of M. Examiners, Biochemistry Comm., 1557
Cancer Inst., 911
Cancer Inst. of Canada, 1914
Comm. on Radiation Protection, 2028
Council to Combat Blindness, Inc., 2032
Found., 908, 1383, 2279
Found., Comm. on Virus Research and Epidemiology, 790
Found. for Infantile Paralysis, 908, 1383
Found. for Research in Cutaneous Med., 1144
Fund for M. Education, 200
Health Council, 1142, 1668
Heart Inst., 1239
Inst. of Allergy and Infectious Diseases, U. S. Public Health Service, 420, 1140
Inst. of Arthritis and Metabolic Diseases, 793
Inst. of Mental Health, Mental Health Small Grant Comm., 1560
Inst. of Mental Health, Training and Standards Branch, 1140
Inst. of Neurological Diseases and Blindness, 1139
Institutes of Health, 74, 197, 295, 421, 790, 792, 793, 909, 1141, 1384, 1557, 2028, 2277, 2279, 2280
Institutes of Health, Metabolic and Arthritic Diseases Div., 701
Institutes of Health, Nat. Advisory Council, 1911
Library of Med., 2280
M. A., Inc., 299, 418
Neurological Research Found., 1143
Office of Vital Statistics, 80, 199, 297, 423, 702, 1385, 1564, 1669, 1790, 1913, 2032
Recreation A., 298
Recreation Congress, 298
Research Council, 418, 1245, 1381, 2279
Research Council, Food and Nutrition Board, Comm. on Infant Nutrition, 2278
Research Council to Canada, 1245
Safety Cong. and Exposition, 422
Safety Council, 1244, 2280
Science Found., 1383, 1668
Soc. for Crippled Children and Adults, 80, 1143
Soc. for the Prevention of Blindness, 1789
Statuary Hall, 1787
Tuberculosis A., 293, 912, 1241
Vitamin Found., 1242
NATO Advisory Group for Aeronautical Research and Development (AGARD), 1910
Navy Department, Aviation Med. Operations Bureau of Med. and Surg., 297
Nebraska Psychiatric Inst., 2278
Nestlé, French, Company, 78
Nevada State M. A., 198, 1910
New England Hosp. Assembly, 1910
Postgraduate Assembly, 1142
Soc. of Anesthesiologists, 200
Soc. of Pathologists, Clinical Pathology Comm., 2278
New Hampshire M. Soc., 199, 1243
New Jersey Acad. of General Practice, 1243
Diabetes A., 792
Indust. Health Conf., 792
Public Recreation A., 298
Soc. of Pathologists, 1382
Radiological Soc. of, 1241
State Department of Health, 792, 1382
New Mexico Soc. of Internal Med., 700
New York Acad. of Med., 1382, 1789, 1911
Allergy Soc., 1241
Bureau of Indust. Health and Workmen's Compensation, 2278
Bureau of M. Care Insurance, 2278
Bureau of Public and Professional Relations, 2278
Catholic Charities, Department of Health and Hospitals, 2159
City Department of Health, 1382, 1666, 2158, 2159
City Department of Health Bureau of Adult Hygiene, 2158
City Health Research Council, 1667
Department of Health, 1383
Diabetes A., Clinical Soc. of, 420
Inst. of Clinical Oral Pathology, 793, 1141
M. Soc. of the State of, 419, 2278
M. Soc. of the State of, Council Comm. on Public Health and Education, 419
M. Soc. of the State of, Council Comm. on Workmen's Compensation, 1667
M. Soc. of the State of, S. Section, 2281
Neurological Inst., 793
Northeastern, Radiological Soc., 1666
Soc. for Clinical Ophthalmology, 1789
State Air Pollution Control Board, 910
State A. of Public Health Laboratories, 702, 1382
New York—Continued
State Department of Civil Defense, 1383
State Department of Health, 294, 419, 910, 1382, 1559
State Department of Health, Div. of Local Health Services, 1668
State Mental Health Research Unit, 197
State M. Soc., 910, 1911
Tuberculosis and Health A., 1559, 1789
Nobel Prize in Med., 2159
Northampton County M. Soc., 1243
North Carolina M. Soc., 75
North Central M. Conf., 701, 2282
North Dakota Acad. of General Practice, 1242
University of, Alumni A., 75
Northwest Soc. for Clinical Research, 911
Nouvelle Faculte de Med. de Paris, 2280
Nuffield Found. in England, 421
Nutrition Found., Inc., 78, 793
Ochsner, Alton, M. Found., 78
Office of Vocational Rehabilitation, Washington, D. C., 419
Ohio, Central, Heart A., 205
Soc. of Internal Med., 1911
Oklahoma City Clinical Soc., 910
Colloquy on Advances in Med., 75
Soc. of Anesthesiologists, 1242
Omaha Mid-West Clinical Soc., 791
State Legislature, 1911
Onondaga County M. Soc., 1788
State Board of Health, 1563
Oregon Acad. of General Practice, 700
State Board of M. Examiners, 1560
State M. Soc., 1141
Trudeau Soc., 2159
Tuberculosis and Health A., 2159
Pack M. Group, 2158
Pan Am. Sanitary Bureau, 1562, 1665, 1791, 2028, 2280
Sanitary Conf., 2280
Zoonoses Center, 1791
Pasteur Inst., 1559, 2282
Pennsylvania Acad. of Physical Med. and Rehabilitation, 2031
Department of Health, 701
M. Soc. of the State of, 420, 1242
Pfeiffer, Gustavus & Louise, Research Found., 298
Phi Delta Epsilon Fraternity, 1241, 1242
Delta Epsilon Fraternity, Alpha Tau Chapter, 2156
Delta Epsilon Fraternity, Beta Epsilon Chapter, 1242
Delta Epsilon Fraternity, Beta Xi Chapter, 1382
Delta Epsilon Fraternity, Upsilon Chapter, 1242
Lambda Kappa M. Fraternity, 1140
Philadelphia, Coll. of Phys. of, 421
Department of Public Health, 421
Roentgen Ray Soc., 2279
Phipps Inst., 2279
Picker, James, Found., 79, 1245
Pittsburgh Department of Health, 2156
Roentgen Soc., 1243
Planck, Max, Inst., 1559
Max, Inst. for Cell Chemistry, Munich, Germany, 2033
Porter, Langley, Neuropsychiatric Inst., 293
Postgraduate Inst., 296
President Eisenhower's Comm. on Employment of the Physically Handicapped, M. Comm., 75, 1667
Comm. on Employment of the Physically Handicapped, Employer's Subcommittee of, 2033
Prevost, Albert, Inst., Montreal, 2282
Puerto Rico M. A., 2031
Pulaski County M. Soc., 2277
Queens Pediatric Soc., 419
Radiological Soc. of North America, 422, 700, 1239, 2028
Receiving Hosp. Corporation, 1382
Reed, Walter, Army Inst. of Research, 1557
Republic Steel, 2157
Research Corporation, 2033
Rhode Island M. Soc., 77
Rockefeller Found., 75, 1791, 2279
Found., Internat. Health Div. of, 1788
Inst. for M. Research, 198, 1241, 2159
Roswell Park Memorial Inst., 1559
Royal Anthropological Inst. of Great Britain and Ireland, 419
Army M. Corps., 2158
Coll. of Surgs. of England, London, 1241, 1912
Soc. of Med. of London, 2156
Sacramento County Board of Supervisors, 1665
Salt Lake County (Utah) Sheriff's Office, 1791
San Mateo, California, County Department of Health and Welfare, Mental Health Section of, 197
Saskatchewan Cancer and M. Research Inst., 1914
Scripps Clinic and Research Found., 1381
Seminar in Blood Banking and Immunohematology, 424
on M. Education for the Non-University Hospitals of New England, 2030

Societies and Other Organizations—Continued
Sheard-Sanford Fund., 1143
Sheckman, Mona Bronfman, Found., 2029
Societe Internationale de Chirurgie, 2158
Soc. of Biological Chemists, 1560
of Biological Psychiatry, 200
for Clinical and Experimental Hypnosis, 1145
of Experimental Test Pilots, 2028
for Investigative Dermatology, 418
for Scientific Study of Sex, 1241
South Dakota State Board of M. and Osteopathic Examiners, 793
Southeastern Allergy A., 1139
States Cancer Seminar, 1385
Southern Gynecological and Obstetrical Soc., 1143
M. A., 1143, 1668
M. A. Woman's Auxiliary, 1668
Regional Council on Mental Health Training and Research, 1243
Regional Education Board, 1384, 1557
Research Inst., 1665
Southwestern Dermatological Soc., 1146
M. A., 1145
Spanish Psychological Soc., 1239
Sports Illustrated's Silver Anniversary All-America, 2281
Squibb Centennial Lecture Comm., 1381
Stanford Research Inst., 1909
Sterling-Winthrop Inst., 1245
S. Research Soc., 296
Symposium in Aviation Med., 2028
on Cinefluorography, 700
on Hypertension, 1911
on Infectious Diseases, 74
on M. Mobilization for Disaster, 1383
Tennessee Radiological Soc., 1667
Texas Acad. of General Practice, 76
Comm. on Higher Education for the State of, 1243
State Hospitals and Special Schools, Board for, 1243
Unitarian Service Comm., 2030
United Cerebral Palsy, 1562
Cerebral Palsy Associations, Inc., 420
Cerebral Palsy Research and Educational Found., Inc., 420
Found., 2157
Fruit Company, 1788
Nations' Food and Agricultural Organization, 793
USAF Scientific Advisory Board, Aeromedical Panel of, 1910
U. S. Children's Bureau, 1239
Department of Defense, 2279
Department of Health, Education and Welfare, 74, 1558
Department of Health, Education, and Welfare, Children's Bureau of, 1913
Department of Health, Education and Welfare, Office of Vocational Rehabilitation, 1239
Department of the Interior, Div. of Health, Bureau of Mines, 2282
Department of the Navy, Div. of Preventive Med., Bureau of Med. and Surg., 1563
Food and Drug Administration, 1382, 1557
Navy M. Corps., 1909
Office of Naval Research, 2279
Office of Vocational Rehabilitation, 1140
Public Health Service, 197, 199, 417, 699, 790, 793, 911, 1140, 1144, 1241, 1245, 1380, 1381, 1557, 1559, 1560, 1563, 1665, 1912, 2028, 2157, 2279, 2280
Public Health Service, Aberdeen Area, Div. of Indian Health, 2157
Public Health Service, Surgeon General's Accident Prevention Advisory Comm., 76
Typhus Comm., 790
Utah State Legislature, 1912
State M. A., 1383
Variety Club of Washington, D. C., 2277
Vermont State M. Soc., 199, 1243
Veterans Administration, 293
Virginia Acad. of General Practice, 1561
M. Soc. of, 794
VOKS (Union of Soviet Societies for Cultural Relations with Foreign Countries), 201
Washington Acad. of Science, 790
D. C. Dermatological Soc., 1239
George, University M. Soc., 1380
State Department of Health, 794
State Heart A., 794
State M. A., 76, 1244
Waterhouse, Benjamin, M. History Soc., 909, 1381, 2156
Wayne County Acad. of General Practice, 1140
County M. Soc., 1140
County M. Soc., Public Relations Comm. of, 2278
County, West, Steering Comm. of Child Guidance Project, 2278
Wellcome Found., 793
Western Indust. M. A., Inc., 2160
S. A., 1562
West Virginia Board of Health, 296
Heart A., 701, 2031
M. Licensing Board, 296
Soc. of Anesthesiologists, 297
West Virginia—Continued
State Board of Examiners for Practical Nurses, 296
State Department of Mental Health, Div. of Community Services of, 2031
State M. A., 296, 911
Tuberculosis and Health A., 1142
Whitney, Helen Hay, Found., 1669
Wisconsin Acad. of General Practice, 77
Anti-Tuberculosis A., 794
Heart A., 77
Orthopedic Soc., 77
Soc. of Pathologists, 1789
State High School Coaches' A., 77
State M. Society's Charitable, Educational and Scientific Found., 77
Wistar Inst., 1383
World Health Organization, 201, 1386, 1665, 2028, 2030, 2280
Rehabilitation Fund, 2033

T

THQ: See Tetrahydroxyquinone
TSH: See Thyrotropin
TACHYCARDIA
paroxysmal, hiatus hernia cause? 1423
TANTALUM
182 for bladder tumors, [Jönsson] 961—ab
TAPES, nylon, self-adhering, [Gershman] 930—C
TASK FORCE
material in emergency medical care study, evaluate, [Medicine at Work] 773
TASTE
bitter, with fairly large hiatus hernia, cause, treatment, 136
TATUM, EDWARD LAWRIE, Nobel prize to, 1915; 2159
TAX
deduction for tuition costs of higher education, A. M. A. resolution on, 69
deduction of professional entertainment expenses, [Medicine and the Law] 1555
Income, deferment on retirement funds: See Jenkins-Keogh Bills
TEBAMIN: See Aminosalicylic Acid, phenyl ester
TECHNOLOGISTS
medical, schools for, 1544
TEENAGERS: See Adolescence
TEETH
caries-producing potential of chocolate, [Mueller] 436—C
caries, statistics, Japan, 1394
changes as signs of radium poisoning, [Dalitsch; Clark] 1929—C
degeneration, estrogens and androgens for? 2333
extraction during anticoagulant therapy, 2081
ill-fitting dentures, intermittent parotid swelling due to, [Furstenberg] 1579—ab
intake of milk relation to formation of, and prevention of caries, 844
oral diagnosis of systemic disease, [Hopp] *748
Syrian hamster, transplantation and replantation experiments using, [Myers] 1288—ab
TEFLON
crimped, peripheral arterial grafts of, [Edwards] 452—ab
TELEVISION
A. M. A. activities, annual reports, 1050; 1074; 1075; 1077
public relations using, Rochester, N. Y. Health Forum, [Townsend & Steinhausen] *1983
sensationalism in medicine, United Kingdom, 809
viewing, movable footrest for elevation of lower extremity, [Fox] *1647
TEMARIL: See Trimeprazine
TEMPERATURE, BODY
cold babies, United Kingdom, 97
TEMPOROMANDIBULAR JOINT: See Jaws
TEMPOSIL: See Carbimide, citrated calcium
TENDONS
inflammation, calcareous and noncalcareous, about trochanter major, [Leonard] *175
sheaths, tuberculosis activated by hydrocortisone, [Jørgensen] 713—ab
TERMINOLOGY
"flat film" of abdomen, what does it mean? (reply) [Lamm] 1154—C
of operating room mortality, A. M. A. resolution on, 67
Standard Nomenclature of Diseases and Operations, annual report, 1041
what is the cause of death? [Erhardt] *161; (reply) [Ziegler] 1260—C
TERRAMYCIN: See Oxytetracycline
TESTES
Hormone: See Androgens
pain during coitus, 15 years after crushing injury, treatment, 1956
undescended, management of, [Brunet] 962—ab
TESTIMONY: See also Witness
medical, impartial, 50—E
TESTOSTERONE: See Androgens
TETANUS
antitoxin, administering under general anesthesia prevent anaphylaxis? 1958
antitoxin, Denmark, 1923
chronic leg ulcers and, [Ilis] 1700—ab
death from, reported, N. J., 75
especially in newborn, Denmark, 706
neonatorum, Brazil, 2167
prophylaxis, penicillin, 1169
toxoid, booster dose in relation to time of injury, 842
toxoid, Canada, 1678
treatment, gallamine triethiodide, India, 805
treatment, India, 1925
treatment, recent evaluation, [Miller & Stoelting] *393
TETANY
neonatal, clinical signs; occurrence in babies of diabetic mothers, [Craig] 1717—ab
TETRACAINE
absorption of local anesthetic, [Campbell & Adriani] *873
as spinal anesthetic, pharmacology, [Featherstone] *1327
TETRACYCLINE
toxicity, hazards, [Herrell] *1875
treatment (intraperitoneal) in diffuse bacterial peritonitis in childhood, [Soave] 965—ab
treatment plus chloramphenicol in brucellosis, [Parravicini] 125—ab
TETRACYN: See Tetracycline
TETRAETHYLTHIURAMDISULFIDE: See Disulfiram
TETRAHYDROXYQUINONE
treatment of keloids, [Kelly] 2073—ab
THALASSEMIA MINOR: See Leptocytosis
THERAPEUTICS
special problems, A. M. A. report, 1056
THIOPENTAL SODIUM
old surplus, use of, 1594
"THIRD PARTY": See under Medicine
THORAX
anomalies, funnel chest, 1550—E
chest x-rays at Naval Station in tropics, notes on histoplasmosis, [Scalia] 224—ab
chest x-rays for school personnel, 2080
chest x-rays, mobile unit in cardiovascular disease detection, [Feig] 841—ab
deformities from sleeping on stomach? 1592
pain of colon origin, [Palmer] 1702—ab
surgery, balanced analgesia for poor-risk patient, [Santos & Sweet] *1977
surgery, for pulmonary tuberculosis, results of, [Frew] 951—ab
surgery, hypothermia in poor risk patients, [Brewer] 1588—ab
surgery team tours South America, Sweden, 1800
THORAZINE: See Chlorpromazine
THROMBOANGIITIS OBLITERANS
treatment: malarial therapy, [Corelli] 1723—ab
THROMBOCYTOPENIA: See Purpura
THROMBOEMBOLISM: See Thrombosis
THROMBOENDARTERECTOMY
for obliterative arteriosclerosis, Norway, 923
THROMBOPATHY: See Blood platelets
THROMBOPHLEBITIS
cerebral, postpuerperal, France, 803
complicating staphylococcic endocarditis treated with ristocetin, [Weber] *1346
THROMBOPLASTIN: See under Blood
THROMBOSIS
acute venous thromboembolism, management, [Anlyan & others] *725
aortic, [Starer] 214—ab
arterial, after promazine hydrochloride, [Opinsky & others] *1224
carotid artery, internal, (simulating intracranial space-occupying lesion) [Clarke] 117—ab; (complications in surgery of) [Lemmen] 456—ab
cerebral, anticoagulants to prevent after one attack in man 65? 1593
coronary, long-term anticoagulants in, United Kingdom, 924
intracranial venous, in puerperium, [dalle Ore] 956—ab
lung thromboembolism, frequency of, Denmark, 1924
mesenteric vascular, [Robertson] 217—ab
postoperative venous, in lung surgery, [Merlo] 330—ab
prevention, movable footrest for elevation of lower extremity, [Fox] *1647
treatment: fibrinolysin, [Sokal & others] *1314
THRUSH: See Monilia; Moniliasis
THYMOMA
benign, aregenerative anemia with, [Clarkson] 1403—ab
THYMUS
cystic, myasthenia gravis after removal, electrolytes during crisis, [Fongi] 456—ab
factor in predisposes mice to radiation-induced leukemia, United Kingdom, 312

THYROID
cancer, after irradiation, United Kingdom, 2295
cancer, metastatic, treatment, 1953
disorder cause progressive myopia? 1837
research, Van Meter prize to Dr. Duncan D. Adams for, New Zealand, 1570
stimulating hormone in blood, New Zealand, 1926
THYROTROPIN (TSH: Thyrotropic Hormone) in blood, New Zealand, 1926
TIC DOULOUREUX: See Neuralgia, trigeminal
TICKS
imbedded, removal, 2206
TIMING in hay fever therapy, factor in evaluation of drugs, (reply) [Engelsher] 1685—C
TISIN: See Isoniazid
TISSUES
culture of Leishmania donovani, Canada, 2291
fluid, free, in female mammary gland, occurrence and significance, [Ratzenhofer] 1276—ab
tissue committee, uses and abuses of, [Henley & others] *2243
TOBACCO
ambiyopia and vitamin B_{12}, United Kingdom, 435
anti-smoking campaign, (United Kingdom) 809; (Norway) 1151
bronchitis with atypical epithelial changes in mice exposed to cigarette smoke, [Leuchtenberger] 223—ab
pathogens in, 363
smoking and cancer, research on, United Kingdom, 212
smoking and lung cancer, public's views on, United Kingdom, 1573
smoking and vitamins metabolism, 2334
smoking genotypes, United Kingdom, 212
smoking in etiology of headaches, 1954
TOCOPHEROL: See Vitamins E
TOLAZOLINE HYDROCHLORIDE
in lung lesions and cancer of esophagus, Brazil, 2040
TOLBUTAMIDE: See Sulfonylureas
TONGUE
biopsy, United Kingdom, 315
cancer, 100 cases, [Argonz] 947—ab
in diagnosis of systemic disease, [Hopp] *748
itching, treatment, 1423
pain in, in multiple sclerosis, treatment, 843
de TONI-FANCONI SYNDROME
cystinosis in, clinical and metabolic study of 2 cases in family, [Worthen] 121—ab
TONSILLITIS
acute, antibiotics for, United Kingdom, 2049
TONSILS
infection, recurrent, medical treatment, 1957
TORNADOES
Flint, management of mass casualties, [Lyttle] 1826—ab
TORT liability of charitable hospitals to patients, [Medicine and the Law] 788
TORTICOLLIS
flattening of one side of head, in infant 11 months old, treatment, 135
spasmodic, not helped by chemopallidectomy, [Paxton & Dow] *755
TORULOIS (cryptococcosis)
involvement of lungs, central nervous system and probably veins, [Pelaez] 321—ab
meningitis, Amphotericin B for, [Rubin] 1271—ab
pulmonary, [Jacobs] 1949—ab
TOURNIQUET
rubber band, for hemostatis in preserving renal function during partial nephrectomy, [Goodwin & Thelen] *179
TOXICOLOGY: See Poisoning; under names of specific substances
TOXOPLASMOSIS
congenital, diagnostic importance of chorioretinitis, [Fair] *250
experimental, in mouse, spiramycin for, [Garin] 835—ab
glandular, United Kingdom, 924
ocular, [Hogan] 2322—ab
recovery of Toxoplasma from human eye, [Hogan] 2321—ab
survey in Toronto area, Canada, 430
survival of Toxoplasma gondii in blood "in vitro," [Talice] 350—ab
United Kingdom, 927
TRACHEA
complications of endotracheal intubation, [Hamelberg & others] *1959
endotracheal intubation, minor laryngeal sequelae of, [Wolfson] 1417—ab
fenestration, indications and contraindications, [Mayer & others] *169
tuberculous tracheobronchial lymph-node involvement in maturity, [le Mellетier] 110—ab
TRACHEOTOMY
for acute intermittent porphyria with respiratory paralysis, [Doll & others] *1973
for postoperative respiratory insufficiency, [Wassner] 1407—ab
TRACHOMA
virus, attempted isolation of, [Smith] 2074—ab
TRACTION
complications and problems of, in supracondylar fractures of humerus in children, [Staples] *730
TRACTOR noise, effect on auditory sensitivity of operators, [Lierle] 1721—ab
TRADE: See under Industrial
TRAFFIC ACCIDENTS: See Automobiles
TRANQUILIZING DRUGS: See also specific drugs as Rauwolfia serpentina
allergic reactions to, [Hollister] 964—ab
intoxication, accidental, control of, [Cann & others] *717
TRANSAMINASE (aminopherase)
activity as index of effectiveness of cortisone in chronic hepatitis, [O'Brien] 443—ab
diagnostic value in hepatic and gastrointestinal diseases, [Pryse-Davies] 443—ab
glutamic oxalacetic, in acute and chronic alcoholism, [Bang & others] *156
glutamic oxalacetic, test in myocardial infarction, calorimetric method, [Ciocia] 213—ab
in neonatal period, aid in differential diagnosis of jaundice, [Kove & others] *860
SGO test in myocardial infarction, [Chapin] 939—ab
TRANSILLUMINATION
of infant head demonstrated by hydranencephaly, [Griffiths] 1713—ab
TRAUMA
aortic-right ventricular fistula after, surgical repair, [King] 114—ab
Athletic: See Athletics
Automobile Accidents: See Automobiles
Burns: See Burns
carbohydrate metabolism and, India, 1799
care of patient with multiple injuries, [Aufranc] *2091
cone shell stings, [Kohn] 1702—ab
contrecoup brain damage with headache, nose discharge and bilateral nerve deafness; cause, treatment, 2081
extradural hemorrhage after, control of, New Zealand, 95
Fractures: See Fractures
head injury in etiology of muscular dystrophy, 1422
hematuria in boxers, [Kleiman] *1633
in pathogenesis of primary rheumatism, [Schiavetti] 1576—ab
Industrial: See Industrial Accidents
loss of smell after head injury, 1423
"Man Who Didn't Walk," medicolegal film, [Medicine and the Law] 72
management of severely injured patient, genitourinary aspects, [Schulte] *2094
neurosurgical care of severely injured patient, [Odom] *2087
nonpenetrating injury of aorta, [Parmley] 113—ab
nonpenetrating injury of heart, [Parmley] 1823—ab
operative, to renal artery, nephrogenic hypertension after, [McDonald] 451—ab
persistent post-traumatic fluid fistulas, [Calvet] 1795—ab
personal injury, expert witness and advisory panels, [Sadusk] *2121
principles in surgical management of mass casualties, [Ziperman] 453—ab
relation to cause or aggravation of osteosarcoma or Ewing's sarcoma? 135
repair injury to common bile duct, [Hoffman] 1268—ab
revision of manual on evaluation of injuries, A. M. A. resolution on, 899
ruptured diaphragm, problem of, [Bernatz & others] *877
severe head injuries, treatment, [Maciver] 2062—ab
testicular pain during coitus 15 years after crushing injury, treatment, 1956
tetanus toxoid booster in relation to time of injury, 842
traumatic aneurysm of thoracic aorta, roentgen diagnosis, [Steinberg] 973—ab
traumatic shock, physiopathology, [Laborit] 840—ab
urticarial response to, cause, treatment, 1837
TRAVEL
international, immunization information on, 914
TREPONEMA
antigens, France, 1255
pallidum immobilization test, biological false-positive serologic tests for syphilis in low socioeconomic group, [Waring & others] *2004
TRIACETYLOLEANDOMYCIN
antibacterial activity of serum after, [Kunin] 2071—ab
N. N. D., 1012
TRIAMCINOLONE
clinical trials, United Kingdom, 1258
toxicity: peptic ulcer, [Brown] 2072—ab
treatment: clinical, laboratory and experimental findings, [Scalabrino] 1948—ab
treatment of systemic lupus erythematosus, [Dubois] 1948—ab
TRICUSPID VALVE
stenosis, clinical features, [Killip] 321—ab
TRIFLUPROMAZINE HYDROCHLORIDE
N. N. D., 1772
TRILAFON: See Perphenazine
TRIMEPRAZINE
new oral antipruritic, [Williams] 2318—ab
TRIMETHYLENE: See Cyclopropane
TROCHANTERIC SYNDROME
calcareous and noncalcareous tendonitis and bursitis about trochanter major, [Leonard] *175
TROPHOBLASTIC Tumors: See Tumors
TROPICAL DISEASE, Caribbean, study of, Florida, 2277
TROPICAL EOSINOPHILIA: See Eosinophilia
TROPICAL MEDICINE
survey of research in, 2279
TROPICS
mass chest survey at Naval station in, notes on histoplasmosis, [Scalia] 224—ab
TRYPANOSOMIASIS
allergic lesions in, Brazil, 88
Brazilian, megaesophagus in, 89
TRYPSIN: See also Chymotrypsin
in treatment of tuberculous lymphadenitis and tuberculous fistulae, [Rapoport] 1581—ab
TRYPTAR: See Trypsin
TUBE
complications of endotracheal intubation, [Hamelberg & others] *1959
endotracheal intubation, minor laryngeal sequelae of, [Wolfson] 1417—ab
TUBERCLE BACILLUS
examine menstrual blood for in tuberculosis sanatorium, [Pickroth] 2070—ab
guinea pig vs. culture tests for, Sweden, 1394
sensitivity to streptomycin and isoniazid of mycobacteria isolated from untreated primary tuberculosis, [Spina] 1945—ab
TUBERCULIN
P. P. D. test, wheal at site of associated with asthmatic attack, 1424
test in physical examinations for school children, (replies) [Faber; and original consultant] 984
test, multiple-puncture technique: "Heaf test," 716
test, new horizons for, 894—E
TUBERCULOMA
criteria for roentgen differential diagnosis, [Oliva] 1725—ab
TUBERCULOSIS
antibodies in Boeck's sarcoid, [Müller] 1288—ab
BCG vaccination, community trials, [Palmer] 355—ab
BCG vaccination of premature infants, [Eckardt] 122—ab
BCG vaccination, otitis in nurslings after, [Soboleva] 464—ab
BCG vaccination, Sweden, 768
BCG vaccine, suppurative lymphadenitis due to, [Mande] 324—ab
BCG vaccine to prevent leprosy, Brazil, 1677
control, 30-year appraisal of BCG vaccination in, [Aronson] 132—ab
death rates, Netherlands, 2045
deaths from, increase, N. Y., 1559
effects of chickenpox on, Brazil, 430
experimental, immunity in, [Acharya] 1527—ab
handling tuberculous specimen, 134
international symposium on, 1144
Japan, 2170
leukocyte sedimentation rate in, [Lusvarghi] 2200—ab
miliary, influence of adrenal cortical hormones on course of, [Nitschke] 2193—ab
peptic ulcer and, higher than average, significant occurrence, United Kingdom, 313
primary, repercussion on immunology of chickenpox in, [Morales] 711—ab
relapse of, Norway, 923
school epidemics, [Mande] 1715—ab
statistics on, India, 1258
survey, India, 1925
treatment: isoniazid, early results in relation to active level in serum, [Vivien] 325—ab
treatment: isoniazid, pyridoxine to prevent toxicity, [Ross] *273; (reply) [Middlebrook] 1685—C
treatment: prednisone in, (India) 1681; (Portugal) 2170
treatment: pyrazinamide and cycloserine, [Zorini] 834—ab
treatment: streptovaricin in guinea pig, [Stern] 837—ab
treatment: Tebamin, [Tørning] 1284—ab
tuberculous empyema, topical pyrazinamide for, [Costa] 2324—ab
tuberculous fistula of esophagus, surgery successful in, [Pecora] 446—ab
tuberculous fistulae and lymphadenitis, trypsin for, [Rapoport] 1581—ab
tuberculous salpingitis, treatment, [Rydén] 1161—ab
vaccine, killed: V. D. S. vaccine (diffusing vaccine Salvioli) [Grandi] 1417—ab; 1418—ab

TUBERCULOSIS OF LUNG
absence of pulmonary hypertrophic osteoarthropathy in, [Skorneck] 168—ab
advanced, cortisone as cover for major surgery in, [Edge] 2185—ab
artificial pneumoperitoneum in, India, 434
cavitation in, Brazil, 88
epidemic in mixed day school, United Kingdom, 810
gastric resection and, [Neubert] 2306—ab
of doubtful activity, chemotherapy in, United Kingdom, 212
parenchymal, endoscopic treatment, [Carabelli] 1158—ab
pathology and bacteriology of resected lesions after chemotherapy, [Cotter] 713—ab
peptic ulcer and, [Waingortin] 823—ab
postprimary, frequency, according to pulmonary arterial pressure, [Mattson] 2298—ab
primary, untreated, sensitivity to streptomycin and isoniazid of mycobacteria isolated from, [Spina] 1945—ab
reactivation (local) of primary focus, [Snijder] 2299—ab
risk of, in pulmonary infiltration and fibrosis, [Chase] 2059—ab
sanatorium, examine menstrual blood for tubercle bacilli in, [Pickroth] 2070—ab
serofibrinous pleurisy in, incidence of morbidity and disorders secondary to, before and after antibiotic era, [Batini] 2317—ab
silica exposure after, 2330
surgical treatment in mentally ill, [Mowlem] 330—ab
surgical treatment, pregnancy after pneumonectomy, 74 cases, [Laros] 2312—ab
surgical treatment: thoracic surgery, results of, [Frew] 951—ab
treatment, conservative, open healing of cavities after, [Wilson] 1285—ab
treatment: Hinconstarch, [Barry] 837—ab
treatment, temporary collapse in, [Rogue] 2300—ab
treatment: Verazide, [Rubbo] 1286—ab
TULAREMIA
Sweden, 807
TUMORS
benign with malignant, significant difference in incidence? 1958
bladder, tantalum 182 for, [Jönsson] 961—ab
bone, what cytology offers in diagnosis, [Sicard] 127—ab
cells in peripheral blood, failure to prove identity of, [Taylor] 2198—ab
Chromaffin Cell: See Pheochromocytoma
diagnosis (early), especially carcinoma of uterus, [Cappa] 1411—ab
fellowship in medical neoplasia, N. Y., 794
in Children: See Children
intestinal, causing intussusception, India, 1393
malignant, with effusion, effect of prednisone in, [Franco & others] *1645
mediastinal, azygos vein dilatation simulating, [Shuford] 971—ab
metastases, needle biopsy of liver in, postbiopsy mortality in, [Fisher] 1811—ab
metastases, pulmonary, operative treatment, [Hansen] 1815—ab
metastases, to liver, differential diagnosis, Austria, 1797
metastatic embryonal rhabdomyosarcoma in growing skeleton, [Caffey] 123—ab
of anterior mediastinum, [O'Gara] 223—ab
pituitary, ACTH-producing, [Nelson] 1158—ab
Polypous: See Polyps
removal from right atrium under hypothermia, [Krčílková] 2062—ab
salivary gland, treatment, 2333
trophoblastic, folic acid and purine antagonists for, [Li] 1416—ab
trophoblastic, related to choriocarcinoma, in women, chemotherapy of, [Hertz & others] *845; 894—E
vascular, management, [Stephenson] 1711—ab
TWINS
identical, kidney transplanation between 7 pairs, [Murray] 2190—ab
smoking genotypes, United Kingdom, 212
TWITCHING
of eye, constant, cause, treatment, 982
signs and symptoms in chronic renal failure, [Effersøe] 214—ab
TYPHOID booster immunizations, interval between, 2334
TYVID: See Isoniazid

U

ULCERS
chronic, of legs; tetanus and, [Riis] 1700—ab
Hunner's, [Kinder] 2320—ab
neurotrophic, of feet, 47 cases, [Kelly & Coventry] *388
premenstrual herpetic mouth lesions, (reply) [Houk] 844
ULTRAVIOLET RAYS
study division inhibition and filament formation of Escherichia coli by, [Deering] 1723—ab
UNDULANT FEVER: See Brucellosis
UNIONS: See Industrial Trade Unions
UNITED MINE WORKERS OF AMERICA
A. M. A. annual reports on, 1066; 1109; (action on resolutions) 1110
A. M. A. conference with, 1110
relationship of medical profession to administrators of medical care plan, (supplementary report) 56; (resolutions on) 66
UNITED NATIONS
international conference on peaceful uses of atomic energy, WHO report, 929
UNITED STATES
Air Force: See Aviation, U. S. Air Force
Bureau of the Budget, estimates of costs for military care by, 1662
Citizens: See also American citizens
citizens studying medicine abroad, 1522; 1523
Congress: See Laws and Legislation, federal
consolidate Federal Civil Defense Administration and Office of Defense Mobilization, 1070
Department of Agriculture with Department of Health, Education, and Welfare, pilot projects in economically depressed areas, 1054
Department of Defense reorganization, annual report on, 1069
Department of Health, Education, and Welfare, advancement of medical research and education through, 1483
government agencies, A. M. A. cooperative relationships, 1079
government employees, medical care for, annual report, 1104
government mass pest control programs, health hazards to humans and wildlife from, 1061
government participation in medical care for indigent in 1958, (Council report) 2151
government study of optimal birth weights, New York City comments on, [Baumgartner] 1154—C
medical-health spending for 1959, 1452
Office of Vocational Rehabilitation contributions to medical education and research, 1530
participation in local medical societies by physicians employed by, 58
UNIVERSITY
of Alabama, grants for new psychiatric clinic at, 2028
of Arkansas, (grant for training researchers) 74; (clinical research wing at medical center) 417; (Virus Research Laboratory) 2277
of Buffalo School of Medicine, (research wing dedicated, photo) 792; (joint study with School of Education) 1461
of California, (new Cardiovascular Research Institute) 1380; (medical school consolidates in San Francisco) 2155
of Chicago, (Home for Incurables affiliates with) 197; (postdoctoral statistics awards) 297
of Cincinnati, study relationships between speech and personality characteristics, 1560
of Colorado, (faculty, research grants for study on muscular dystrophy and heart surgery) 1239; (grant to for research facilities) 2028; (emergency civil defense hospital unit) 2155
of Florida College of Medicine, (grants to) 197; 790; 1666 (new department of pediatrics) 1666
of Illinois, (expansion program in Chicago) 198; (brain chemistry research) 1139
of Miami School of Medicine, USPHS grant for equipment for research building, 197
of Michigan, (exchange program for interns and residents) 791; (hospital services; testimonial to veteran teachers) 909; (Division of Gerontology) 1102; (public health research and training) 1240
of Minnesota, surgical travel fellowships, 1382
of Mississippi School of Medicine, construction of student housing begun, 1240
of North Carolina School of Medicine, grant for program of development, 75
of Oregon Medical School, grant for research building at, 1911
of Pennsylvania, (March of Dimes awards to) 1383; (Bockus International Society of Gastroenterology organized by graduate alumni) 1560; (gift for radiology center) 1912; (dedicates School of Allied Medical Professions, research building construction) 2279
of Pittsburgh, (established health law center) 295; (plans experimental program of medical education) 1467
of Tennessee, (study effects of exposure to low amounts of radiation) 1561; (new research installation at) 1667
of Texas Postgraduate School of Medicine, Medical Cruise to Caribbean, 1142
of Utah Medical Center planned, 1912
UNIVERSITY—Continued
of Washington, (Dr. Wagner appointed to Cardiovascular Research Chair) 167; 1854, Aug. 9, 1958; (correction) 468; 202, Sept. 13, 1958; (new internship and residency program) 296; (faculty teaching conference) 1466
of Wisconsin, (cosponsors symposium on bone, program) (council symposium) 520; (30 year experiment with preceptorships) 1466
State U. of New York (Downstate Medical Center, new department of rehabilitation medicine) 1667; (Upstate Medical Center, reconstructed Basic Science building) 1788
Universidad del Valle at Cali, new medical school, Colombia, 1391
URETERS
amyloidosis, primary, [Andreas] 466—ab
duplication and ectopia, clinical importance, [Thompson & Amar] *881
duplication, bilateral complete, [Powell] 960—ab
idiopathic retroperitoneal fibrosis involving, [Hackett] 1707—ab
role in pathogenesis of ascending pyelonephritis, [Talbot] *1595
vesicoureteral reflux in children, [Jones] 1579—ab; (significance) [Politano] 1821—ab
URETHRA
diverticulum, perineal; complication of ischium removal, [Comarr & Bors] *2000
rupture, management of severely injured patient, [Schulte] *2094
URIC ACID in Blood: See Blood
URINARY SYSTEM
calculi, prevent after paralytic poliomyelitis, [Plum] *1302
infection in children, persistent and recurrent, [Forsythe] 2320—ab
obstruction, acute renal failure and generalized abdominal pain, (Diagnostic Problems) [Kushner & Szanto] *1778
tuberculosis, latent, Belgium 307
URINATION
incontinence not always present in ureteral duplication and ectopia, [Thompson & Amar] *881
incontinence, water treatment, 1836
URINE
Δ-aminolevulic acid and porphobilinogen in different types of porphyria, [Haeger] 2181—ab
Blood in: See Hematuria
calcium and inorganic phosphate in patients with calcium stone of renal origin, [Hodgkinson] 1820—ab
chorionic gonadotrophic hormone excretion after chemotherapy of choriocarcinoma and related tumors, [Hertz & others] *845; 894—E
diastase, hyperdiastasuria and acute pancreatitis after partial gastrectomy, [Wallensten] 1708—ab
electrolyte excretion, effect of chlorothiazide on, [Lassen] 2196—ab
foaming, cause, 1837
Glucose in: See Glycosuria
high production to prevent urinary calculi after paralytic poliomyelitis, [Plum] *1302
5-hydroxy-3-indole acetic acid in functioning carcinoids, [Sauer & others] *139
17-ketosteroids in leishmaniasis, India, 209
porphobilinogen in acute intermittent porphyria with respiratory paralysis, [Doll & others] *1973
studies, metabolic and biochemical changes in normal pregnancy, (Council article) [Macy] *2265
Sugar in: See Glycosuria
virus in, in Coxsackie B virus infection, [Utz & Shelokov] *264
water and electrolyte excretion in preeclampsia, chlorothiazide effects on, [de Alvarez & O'Lane] *2226
yeast in, significance, (replies) [O'Conor; and original consultant] 474
UROLOGY
American, obligation to world, [Barnes] *750
essentials for residency training in, annual report, 1099
URTICARIA
after trauma, cause, treatment, 1837
UTERUS
abnormalities, hypofibrinogenemia relation to, 2085
adnexa, bacterial lipopolysaccharides for inflammation of, [Fricke] 1273—ab
bleeding and vaginal cytology, India, 2292
bleeding, functional, 17-alpha-hydroxyprogesterone caproate for, [Zorn] 1274—ab
cervix, advantages of cold conization; new instrument, [Fleming] *886
cry in: vagitus uterinus, [Iklé] 459—ab
endocervicitis and sterility, Brazil, 802
prolapse, estrogens in, [Anderson] *173
UTERUS CANCER
cytological screening through physicians' offices, 65,163 examinations, [Calabresi & others] *243

UTERUS CANCER—Continued
early diagnosis, [Cappa] 1411—ab; (Brazil) 2041
of cervical stump, [Ullery] 1714—ab
of cervix and fundus, value of Papanicolaou smear in diagnosis, [Anderson] 836—ab
of cervix, complementary therapy with high doses of testosterone enanthate, [Rossi] 1584—ab
of cervix, current treatment, [Kottmeier] 1273—ab
of cervix, cytodiagnosis, [Cutts] 337—ab; (United Kingdom) 2174
of cervix, early, preserve ovarian function in young women, [Kreba] 1939—ab
of cervix, epidemiologic factors in, [Jones] 829—ab
of cervix, in situ, histochemical evaluation, [Nesbitt] 1586—ab
of cervix, inoperable, Brazil, 88
of cervix, intraepithelial, indications for conservative therapy, [Krieger] 1276—ab
of cervix, optimum spacing of repeat follow-up Papanicolaou smears, [Schulz & others] *248
of cervix, possible role of smegma in, [Heins] 2312—ab
of cervix, potential of exfoliative cytology in detection, [Berg] 1161—ab
of cervix, pseudoneoplastic changes of vesical mucosa after radium therapy for, [Natale] 349—ab
of cervix, surgical and radiologic treatment, [Frick] 2313—ab
of endometrium, constitutional stigmas with, [Garnet] 830—ab
of Gartner duct origin, [Andujar] 2191—ab
UVEA
uveo-encephalitic syndrome or Vogt-Koyanagi-Harada disease, [Reed] 1937—ab
UVEITIS
helminths and protozoa cause, [Kessel] 345—ab

V

V-CILLIN: See Phenoxymethyl Penicillin
VACCINE: See also under specific diseases as Influenza; Poliomyelitis; etc.
distribution, A. M. A. Board action on, 55
VACCINIA
generalized, revaccination contraindicated, 979
VAGINA
cytology and uterine bleeding, India, 2292
cytology to study ovary activity, India, 2041
moniliasis, nystatin for, [Caruso] 957—ab
soft drink bottle in peritoneal cavity via, [Hoge & Thedieck] *40
tumors, metastatic hypernephroma, [Overbeck] 338—ab
VAGINITIS
in etiology of mycoses of newborn, [Bret] 458—ab
VAGITUS uterinus: cry in uterus, [Ikié] 459—ab
VAGOTOMY: See Nerves, vagotomy
VALVOTOMY: See Aortic Valve
VANDERBILT study of maternal and infant nutrition, (Council article) [McGanity & others] *2138
VAQUEZ'S DISEASE: See Polycythemia vera
VARICELLA: See Chickenpox
VARICOSE VEINS
Brazil, 803
VASOCONSTRICTORS
effects on absorption of local anesthetics, [Campbell & Adriani] *873
VASODILATORS
effect on cerebral blood flow and brain metabolism during cerebrovascular accidents, [Feruglio] 1822—ab
VATER'S AMPULLA: See Ampulla
VEINS
azygos, dilatation simulating mediastinal tumor, [Shuford] 971—ab
hepatic, catheterization to determine portal pressure, [Bücheri] 452—ab
Inflammation: See Phlebitis
probable involvement in cryptococcosis, [Pelaez] 321—ab
surgery, shunts for bleeding esophageal varices, [Youngblood] 2183—ab
venous spiders in young women, treatment, 1294
VELCRO SALES CORP., New York, manufacturers of self-adhering nylon tapes, [Gershman] 930—C
VENA CAVA
inferior, idiopathic retroperitoneal fibrosis involving, [Hackett] 1707—ab
superior, obstruction, [Allansmith] 1936—ab
VENEREAL DISEASE
at sea, treatment, Sweden, 1801
VENTILATION: See Respiration
VENTRICULAR FIBRILLATION
resuscitation successful in myocardial infarction with, [Bloomfield] 336—ab
VERAZIDE: See Dimethoxybenzal Isonicotinylhydrazone
VERSENATE: See Edathamil
VERTIGO
aural, Ménière's disease, treatment, 1835
VESICULOPROSTATITIS: See Prostate; Seminal Vesicles
VESPRIN: See Triflupromazine
VEST, WALTER E., veteran A. M. A. delegate retires, 292
VETERANS
affairs, conference on, annual report on, 1104
affairs, legislative developments in, annual report, 1105
medical care, A. M. A. policy on, annual report, 1103
medical care, medical society responsibility in, annual report, 1103
VETERANS ADMINISTRATION
facilities, statement of A. M. A. to House of Representatives regarding hospital beds authorized, 191
hometown medical care, annual report, 1104
Hospitals: See also Hospitals
hospitals, service-connected disabilities in, A. M. A. resolutions on, 67
insurance cases, new action, (Council article) 905; 1104
medical research program expanded, 1915
neuropsychiatric hospital proposed at Brecksville, Ohio; new one in Topeka, (photo) 1248
personnel changes, 1671
physicians, A. M. A. service membership for, annual report, 1117
undergraduate and graduate medical training programs, 1531
welfare and medical program, missiles or pensions, (Miscellany) [Orr] *1686
wheel chair homes, 1915
VETERINARY CORPS
military, annual report on, 1069
VIADRIL: See Hydroxydione Sodium Succinate
VIBRATION
effects on pregnancy, 474
VINCA
rosea, hypotensive sedative from, India, 1799
VIRCHOW, RUDOLPH (1821-1902)
centennial lecture, "Cellular Pathology," 798
VIREMIA: See Virus, in blood
VIRGIN ISLANDS Medical Society, application to become constituent member of A. M. A., 55
VIRUS
AD; APC; ARD; RI: See Adenovirus
CA, isolation of agent resembling, from infant with croup, [Crambiett] 461—ab
Coxsackie: See Coxsackie Viruses
ECHO: See ECHO Virus
Hepatitis: See Hepatitis, Infectious
in blood in mumps virus infections, [Overman] 2061—ab
infection of respiratory tract in children and Stevens-Johnson syndrome, [Hölscher] 959—ab
Influenza: See Influenza
"Interferon," virus growing in tissue culture prevents other viruses from growing, United Kingdom, 312
Kyasanur Forest disease, India, 804
of trachoma, attempted isolation, [Smith] 2074—ab
Poliomyelitis: See Poliomyelitis
Research Laboratory to be established at U. of Arkansas Medical Center, 2277
VISION
effect of fluorescent light on, (Council report) 47
guides to evaluation of permanent impairment, 58; 414—E; (Committee report) *475
Loss of: See Blindness
VITAL STATISTICS
Alaskan health statistics, 1665
birth rate, New York City established "Multiple Birth Roster," 1666
births decline, Mich., 2030
health in Denmark, 1924
health standards, Israel, 2043
influenza on Okinawa and Oregon, 1563
life expectancy 20 years longer, 80
marriages decline, 77
mortality among centenarians, Pa., 701
mortality, causes of death, Norway, 1571
mortality from accidents, 1142
mortality from appendicitis falling, Norway, 922
mortality from cancer, 299
mortality from fires in 1957, N. C., 2159
mortality from lung cancer, (United Kingdom) 1395; (compared to U. S.) [Hammond] 2058—ab
mortality from tuberculosis increases, N. Y., 1559
mortality in hypertension, medical and surgical treatment effects on, comparison, [Perry] 2300—ab
mortality in operating room, develop classification of, and terminology for, A. M. A. resolution on, 67
Mortality, Infant: See Fetus; Infants; Stillbirth
VITAL STATISTICS—Continued
Mortality, Maternal: See Maternity
mortality, tuberculosis death rates, Netherlands, 2045
mortality, what is the cause of death? [Erhardt] *161; (reply) [Ziegler] 1260—C
VITAMINS
Council statement on multivitamin preparations as dietary suplements and as therapeutic agents, 1057
deficiencies, produce experimental congenital malformations by diet, (Council article) [Warkany] *2026
effects on plasma lipids and atherogenesis in cholesterol-fed cockerels, [Stamler] 976—ab
metabolism and smoking, 2334
VITAMINS A
intoxication, symptoms, 1296
VITAMINS B COMPLEX
B_6: See Pyridoxine
B_{12}: See Cyanocobalamin
deficiency causing symptoms of atypical endogenous depression, [Keuter] 1938—ab
VITAMINS C: See Ascorbic Acid
VITAMINS D
sunbathing, and calcium absorption, 1953
VITAMINS E
avitaminosis in cystic fibrosis of pancreas, morphology of muscle in, [Blanc] 2071—ab
treatment of intermittent claudication, [Livingstone] 2195—ab
VITILIGO
etiology, 1957
VITREOUS HUMOR: See Hyalitis
VOCATIONAL REHABILITATION
Office, contributions to medical education and research, 1530
VOGT-Koyanagi-Harada disease or uveoencephalitic syndrome, [Reed] 1937—ab
VOICE
executive's dysphonia, [Gardner] 1579—ab
functional laryngitis, 1733
VOMITING
aspiration of vomitus, United Kingdom, 1152
signs and symptoms in chronic renal failure, [Effersø] 214—ab
VULVA
kraurosis-leukoplakia syndrome, topical androgens for, [Richardson] 2312—ab
tumors, metastases of hypernephroma, [Overbeck] 338—ab

W

WAGES
internship stipends, 525
maximum resident stipends in Selective Service, 1533
resident, in V. A., 1533
WALDENSTROM'S Macroglobulinemia: See Globulin
WAR
aerial, research on human factors of, [Stapp] *1744
medical preparedness, [Hays] *254
nuclear, use of medical x-rays in, [Nitka] 130—ab
role of Human Factors Branch at Air Force Flight Test Center, [Rowen] *1190
WARFARIN SODIUM
experiences with, [Porter] 2195—ab
toxicity: alopecia, 1169
WASHERS, pan, subungual hemorrhage in, [Long] *1226
WATER
disinfection, 166:427, January 25, 1958; (correction) 166:364, Sept. 20, 1958
excretion in preeclampsia, chlorothiazide effects on, [de Alvarez & O'Lane] *2226
fluoridation, (A. M. A. report) 1658; (Canada) 2291
heavy, AEC to lease or sell, 301
heavy, excretion, 362
in emergency treatment of chemical eye injuries, (Council report) 47
pollution report, 2035
treatment of enuresis, 1836
WAYNE STATE UNIVERSITY
construction of Industrial Medicine and Hygiene Building, 198
gifts and grants accepted by, 1140; 1381
WEBSTER, NOAH (1758-1843)
epidemiologist, 4-cent stamp honors, (Miscellany) [Thoma] 1804
WEIGHT: See Body weight; Infants, Newborn; Obesity
WELFARE STATE: See Socialism
WERNER'S SYNDROME
review of, second autopsied case, [Perloff] 325—ab
WESTERN Interstate Commission for Higher Education, 1487
WESTERN RESERVE UNIVERSITY
new medical program, evaluation, 1467
plans for research building, 2157
WHEEL CHAIR Homes, V. A., 1915
WHIPLASH INJURIES
neurophysiologic basis for pain and rehabilitation methods, [Selets] *1750

WHIPPLE'S DISEASE
systemic involvement, cytologic observations, [Sieracki] 2199—ab
WHOOPING COUGH
immunization, neurological complications of, [Berg] 1280—ab
WILSON'S DISEASE: See Lenticular Nucleus, hepatolenticular degeneration
WITNESS
expert, and advisory panels, [Sadusk] *2121
WOMAN'S AUXILIARY
activities in mental health, 1053
A. M. E. F. activities, 1120
annual report, 1117
legislative activities, 1048
Minneapolis meeting, program, 1030
President addressed House of Delegates, San Francisco meeting, 55
WOMAN'S MEDICAL COLLEGE
grant to, 1560
health research facilities grant to, 199
WOMEN
ambulant, evaluate random blood glucose levels among, [Macy & others] *2010
chemotherapy of choriocarcinoma and related trophoblastic tumors in, [Hertz & others] *845; 894—E
physiological basis for hormone therapy in, [de Alvarez & Smith] *489
WOOD carving, [Leisure Corner] 1930
WORK; WORKMEN: See Industrial Health
WORKMEN'S COMPENSATION
A. M. A. Committee on, "Rehabilitation" dropped from title, committee reactivated, 1065
cases in VA, annual report, 1104
WORKMEN'S COMPENSATION ACTS: See Medicolegal Abstracts at end of letter M
WORLD
American urology's obligation to, [Barnes] *750
Conference on Medical Education, second, 1959, 1485
Congress of Obstetrics and Gynecology, second, report on, Canada, 89
Medical Association meeting at Copenhagen, (photos) 1233
WOUNDS
surgical, infection, United Kingdom, 925
WRITING
science, workshop, annual report on, 1052
WYAMINE: See Mephentermine
WYDASE: See Hyaluronidase

X

XANTHOMA
diabeticorum, treatment, 1423
XYLOCAINE: See Lidocaine

Y

YMCA: See Young Men's Christian Association
YAWS
differentiating from tertiary syphilis, 2205
YEAST
antibiotic with therapeutic and prophylactic properties, [Parfentjev] 1724—ab
in urine, significance, (replies) [O'Conor; and original consultant] 474
YOUNG MEN'S CHRISTIAN ASSOCIATION
physical conditioning program for asthmatic children, [Scherr & Frankel] *1996
YTTRIUM
90 implant, hypophysectomy with, [Gleadhill] 2307—ab
90, implant in pituitary for metastatic mammary cancer, United Kingdom, 315
90, interstitial radiation of pituitary; indications, technique, results, [Dogliotti] 1289—ab

Z

ZINADON: See Isoniazid
ZINC
punch in zinc galvanized container poisonous, Calif., 790
ZOONOSES
center in Argentina, grant for, 1791

AUTHOR INDEX

A

Aarseth, S., 1415
Abels, J., 442
Abrams, H. L., 1280
Acharya, B. K., 1587
Adams, J. A., 354
Adriani, J., *873
Adwan, K. O., 332
Affeldt, J. E., *1973
Agnos, J. W., 944
Aiken, D. W., 340
Aiagille, D., 326
Alajouanine, T., 1410
Alberth, B., 1284
Alexander, E., Jr., 453
Allan, F. N., *890
Allansmith, R., 1936
Allen, J. G., *1735
Alsted, G., 1578
Alt, H. L., *270
Altemeier, W. A., 2198
Amar, A. D., *881
Ambrus, C. M., *1314
Ambrus, J. L., *1314
Anderson, A. D., 830
Anderson, H. E., *173
Anderson, J. C., 2319
Andreas, B. F., 466
Andreassen, B., 825
Andujar, J. J., 2191
Anlyan, W. G., *725
Antonucci, M., 444
Apgar, V., *1985
Aravanis, C., 347
Arcadi, J. A., 1943
Archibald, H. C., 1930
Argonz, V. E., 947
Ariel, I. M., 350
Aron, E., 1404
Aronson, J. D., 132
Arvold, N. V., *243
Asfora, J., 1703
Aufranc, O. E., *2091

B

Bauder, E. W., 1721
Babbott, D., *498
Babow, I., *268
Baker, L. D., *1005
Baker, R., *1178
Bakulev, A. N., 1164
Balaban, V. G., 341
Balows, A., 1827
Bang, N. U., *156
Baraff, A. A., *1194
Barber, M., 945
Barnes, R. W., *750
Baron, D. N., 949
Barrie, H., 1269
Barron, A. J., *1755
Barron, C. I., *1194
Barry, V. C., 837
Bartels, C. C., *743
Bass, A., 1684
Basto, E. L., 2186
Batini, F., 2317
Bauer, H., 1410
Baumann, F., *2010
Baumgartner, L., 1154
Baxter, C. R., 109
Beaugard, E., *1178
Beck, C. S., *2110
Beck, E., 2185
Becker, R. M., 346
Belknap, E. L., *1847
Belle, M. S., *2128
Bellesia, L., 2075
di Bello, R., 1698
Benjamin, H. B., 2311
Berberian, D. A., *2257
Berg, J. M., 1280
Berg, J. W., 1161
Bergenstal, D. M., *845
Berger, E., 220
Bergman, P., 2315
Berkson, D. M., *2124
Bernatz, P. E., *877
Bernheim, M., 1715
Bernstein, L. M., *27, 104
Berrien, C., *1985
Berry, H. K., 462
Bertolini, A. M., 840
Bidder, T. G., *514
Bill, A. H., Jr., 116
Billingsley, J. S., 1725
Biorck, G., 841
Birge, E. A., *248
Birke, G., 2182
Birnbaum, D., 324
Bitner, W. P., 129
af Björkesten, G., 450, 1712
Blackfield, H. M., 1710
Blades, B., *365
Blanc, W. A., 2071
Blau, L., *1217
Blazsik, C. F., *169
Bloomfield, D. K., 330
Blossom, R. C., *2224
Blount, W. P., 327
Bogacz, J., 456
Bogen, E., *48
Bogoch, S., 1411
Bond, J. F., *2110
Bond, R. M., 975
Bonica, J. J., *734
Bonniot, A., 449
Bono, G., 833
Bornet, V. D., *2025
Bors, E., *2000
Botham, R. J., 714
Boucek, R. J., *411
Bower, A. G., *1973
Bowman, W. D., 339
Boyd, L. J., *1830
Boyle, J. F., *2054
Bradlow, B. A., 1809
Braude, A. I., 836
Braun, W. E., *1882
deBray, C., 825
Breese, B. B., 1283
Brennan, J. J., *504
Bret, J., 458
Brewer, L. A., 1588
Bridenbaugh, L. D., *1334
Bridgforth, E. B., *2138
Briggs, J. N., 460
Brocker, R. J., *261, (correction) 913
Brofman, B. L., *2110
Bronson, E. D., Esq., *73
Brown, C. H., 2072
Brown, H. B., *1989
Brown, H. E., Jr., *411
Brown, H. W., *1648
Brown, W. G., 1825
Brummelkamp, W. H., 123
Brunet, J., 962
Brunschwig, A., 964
Bruton, O. C., 1820
Bucha, G., 222
Bücheri, E. S., 452
Buechner, H. A., 105
Bühler, I., 222
Bulbrook, R. D., 947, 948, 948, 1819
Bullock, A. C., *410
Burack, W. R., 2298
Burford, T. H., 1816
Burnett, W., 1950
Burnham, P. J., *760
Burnside, A. F., Jr., *877
Buscaglia, S., *409
Buser, F., 220
Buxeda, R., 345
Byrnes, V. A., 778
Bywaters, E. G. L., 819

C

Caeiro, A., 819
Caffey, J., 123
Calabresi, P., *243
Calnan, J., 1160
Calvet, J., 1705
Calvo Melendro, J., 1266
Cammer, L., *1839
Campbell, D., *873
Cane, T. E., Jr., 464
Cann, H. M., *717, 1577
Cappa, A. P. M., 1411
Carabelli, A. A., 1158
Carlson, D. J., *248
Carone, F. A., 2314
Carroll, J. J., *2218
Carter, C. H., 337
Caruso, L. J., 957
de Carvalho, C. A., 344
della Casa, R., 1819
Case, R. B., 326
Casellas Bernat, A., 1946
Castedo, C., 2303
Castleton, K. B., 111
Catanzaro, F. J., 940
Cauwet, R. W., *991
Cervantes, L., *395
Chambers, W. N., *1617
Chandler, G. N., 2302
Chapin, M. A., 939
Chaptal, J., 960
Chargin, L., 1163, 1163
Charkes, N. D., 2323
Chase, J. F., 2059
Chaudhry, A. P., 2325
Chávez, C., 2315
Chesley, L. C., 2071
Chiappa, S., 972
Chikina, N. S., 939
Chosson, J., 119
Churchill, E. D., 1816
Churchill, J. A., 831
Ciocia, D., 213
Clagett, O. T., *877
Clahr, J., *237
Clark, S. D., *761
Clark, W., 132
Clarke, E., 117
Clarkson, B., 1403
Cohen, M. R., *1963
Cohn, E. M., 353
Colcock, B. P., 2065
Cole, S. L., *275
Colwill, J. C., 116
Comarr, A. E., *2000
Consoni, R., 2065
Cooper, D. R., 333
Cooper, I. S., 2067
Cooper, J., 319
Cooper, K. H., 831
Cope, O., 2186
Corelli, F., 1723
Cornish, A. L., 1697
Costa, G., 2324
Cote, R., 1160
Cotter, D. J., 713
Courtois, G., 1589
Courville, C. B., *1337
Cousin, J., *1131
Coventry, M. B., *388
Cox, G. E., 969
Craig, W. S., 1717
Cramblett, H. G., 461
Cranny, R. L., 1284
Crawford, E. S., *509
Crockett, J. E., *2006
Croizat, P., 942, 1580
Cullinan, E. R., 323
Cummings, V., *501
Cutler, C. W., Jr., 449
Cutler, J. G., 2316
Cutts, I. H., 337

D

Daffner, J. E., 2060, 2060
Dagradi, A. E., 941
Dahl, L. K., 322, 323
Dalitsch, W. W., 1929
Damon, A., 438
Danowski, T. S., *1886
Darby, W. J., *2138
Darke, C. S., 123
Davidsen, H. G., 115
Davies, J. W., 1290
Davila, J. B., 2069
Davis, J. B., 2306
Davis, N. B., *2098
de Alvarez, R. R., *489, *2226
de Andino, A. M., Jr., 1405
Dearing, W. H., *139
DeBacker, L. J., 1929
De Bakey, M. E., *509, 2188
Decourt, J., 454
Deering, D., *2263
Deering, R. A., 1723
DeLaughter, G. D., Jr., *725
Deming, Q. B., 322
Denck, H., 1408
Denson, J. S., *1330
Dermksian, G., *1200, *1623
Dickson, R. J., 352
Dieckmann, B., 1580
Diligenskaya, L. A., 341
Dimond, E. G., *2006
Dodelin, R. A., *1005
Dodge, H. W., 336
Dogliotti, A. M., 1289, 2309
Doletski, S. Y., 342
Doll, S. G., *1973
Dometj, B., 342
Donaldson, R. M., 1266
Donhauser, J. L., 446
Dow, R. S., *755
Drager, G. A., 828
Dragstedt, C. A., *1652
Driscoll, S. G., *399, *404
Dubin, L., 1291
Dubois, E. L., 813, 1948
Dubost, C., 1160
Dugger, G. S., 2184
Duncan, G. M., *1755
Dundee, J. W., 974
Dupuy, R., 1406, 1406
Durant, B. R., 322
Dustan, H. P., 2299
Duzan, K. R., *2243

E

Eckardt, F., 122
Ecker, A., 119
Economou, S. G., 951
Edge, J. R., 2185
Edinburgh, A., 824
Edwards, W. S., 452
Effersøe, P., 214
Ehlers, P. N., 1161
Ehrenkranz, N. J., 1726
Ehrlich, E. W., *1971
Ehrlich, R. M., 1277
Eiber, H. B., 1159
Eisenstein, B., 108
Ekström, T., 343
Ellison, E. H., 112
Ellison, R. R., 1584
Ellwood, P. M., Jr., 319
Enderlin, N., 2064
Engelsher, D. L., 1685
Enger, E., 2061
Erhardt, C. L., *161
Erichsen, F., 2183
Erickson, J. C., *2249
Eriksen, K. R., 837
Erlendsson, F., 964, 964
Escher, D. J. W., 1696
Espinoza, J., 340
Esselier, A. F., 1722
Evans, A. S., 2077
Evans, J. A., 129, *743
Even, R., 1720
Ezzo, J. A., 1405

F

Fabrikant, J. I., *725
Fair, J. R., *250
Featherstone, R. M., *1327
Feemster, R. F., 1418

Feig, M., 841
Felder, J., 2318
Fell, E. H., 1705
Felton, J. S., *1854
Feofilov, G. L., 839
Fernando, N., 1407
Feruglio, F. S., 1822
Feruglio, G., 2059
Fields, W. S., *509
Figley, M. M., 973
Fink, B. R., *2245
Fischel, E. E., 1696
Fish, R. G., 1709
Fisher, B., 839
Fisher, C. J., 1811
Fisher, E. R., 349
Fleming, A. R., *886
Fleming, H. A., 447
Fletcher, E., 437
Flock, E. V., *139
Flood, C. A., 942
Fodden, J. H., 969
Follman, J. F., Jr., *1641
Fongi, E., 456
Forbes, J. A., 1265
Ford, R. V., *410
Forsham, P. H., *35
Forssell, J., 1821
Forsythe, W. I., 2320
Foster, J. J., *257
Fountain, J. R., 1582
Fowler, R. S., 1820
Fox, E. C., 2302
Fox, J. D., *1647
Franco, J., *1645
Frank, I. N., 466
Frank, M. E., *2010
Frankel, L., *1996
Frankel, S. A., 1813
Frazier, S. H., *1755
Freedman, P., 1703
Freeman, W., 335
Freeman, W. J., 348
French, L. A., 334
Freundlich, E., 832
Frew, H. W. O., 951
Frick, H. C., II, 2313
Fricke, H., 1273
Fridge, J. C., *758
Friedman, S., 221
Frost, J. W., 2323
Fruin, R. C., *27
Fujimoto, J. M., *1769
Furstenberg, A. C., 1579
Furtado, D., 1409

G

Gadboys, H. L., *229
Gadsden, R. H., *1220
Gangarosa, E. J., 1582
Gardiner, P. A., 346
Gardner, W. H., 1579
Garin, J. P., 835
Garnet, J. D., 830
Gaspar, M. R., 1267
Gauid, R. L., *1735
Gebhart, W. F., 107
Gehrt, J., 1945
de Gennaro, F., 2313
Gerbode, F., 2187
Gershman, M., 930
Gerson, K. L., *1450
Gerstner, H. B., *381
Gibson, J. G., II, *399
Giles, C. L., 1944
Giornelli, C., 1583
Glova, C., 440
Girard, M., 2189
Giraud, P., 1719
Giusti, M., 337
Gjørup, S., 1287
Glazier, M. M., 460
Gleadhill, C. A., 2307
Glenn, F., 2184
Glorig, A., Jr., *376
Glover, R. P., *229, 329
Goldenberg, I. S., 1587
Goldgraber, M. B., 819, 967
Goldstein, S., *860
Golin, M., *1371
Gollub, S. W., *1971
Golubev, I. S., 104
Goodwin, W. E., *179
Gordon, E. S., *1208
Gore, I., 1724
Gorvett, E., *27
Gottsegen, G., 1929
Grandi, F., 1417, 1418
Grant, J. L., *1617
Grant, R. P., 968
Granville, N. B., 1286
Grasveld, C. M., 218
Greenbaum, D., 125
Greenberg, L., 1726
Greene, H. G., 1288
Greenspan, R., *2104
Greisheimer, E. M., *2249
Griffith, G. C., *275
Griffiths, J., 1713
Gsell, O., 117
Guest, G. M., *2015
Gueukdjian, S. A., 1279
Gundersen, G., 416, 1020, 1786, 2273
Gwathmey, O., 1268

H

Hackett, E., 1707
Haeger, B., 2181
Haggerty, R. J., *6
Hahneman, B. M., *270
Haizlip, T. M., 337
Hales, D. R., *1645
Hall, B. E., *1645
Hall, G. H., 1286
Haivorsen, G., 1157
Hamelberg, W., *1959
Hammer, H., *1839
Hammond, E. C., 2058
Hampton, J. W., 821
Hanbury, W. J., 837
Hansen, E., 1415
Hansen, J. L., 1815, 1815
Hansen, O. E., 1576
Hansson, C. G., 1720
Harington, M., 1416
Harper, H. A., *35
Harrer, G., 1712
Harrington, R. W., *20
Harris, R. C., 461
Harvald, B., 216
Hassard, H., *2117
Hatfield, C. C., 2192
Hayden, G. E., 1272
Hayden, W. de G., 218
Hays, S. B., *254
Head, L. R., *1767
Hedberg, E., 1162
Hein, F. V., *1434
Heins, H. C., Jr., 2312
Heise, H. A., *1359
Heller, H., 821
Hellström, J., 829
Helm, W. H., 2197, 2197
Helsingen, N., Jr., 2063
Henderson, R. P., 131
Hendren, W. H., *6
Hendrick, J. W., 2063
Henington, V. M., 1277
Heniey, P. G., *2243
Henschke, U. K., 351
Hepner, R., *1774
Herrell, W. E., *1875
Herrmann, G. R., 2194
Hershenson, L. M., *1871
Hershenson, M. A., *1871
Hertz, R., *845
Herxheimer, H., 2196
Hewson, J. S., 1157
Hilbish, T. F., *845
Hill, H. E., 946
Hill, L. D., 2309
Hilleman, M. R., 2301
Himbert, J., 439
Hine, C. H., *1769
Hinman, J., 521, 1459
Hitchcock, C. R., 1267, 2066
Hodgkinson, A., 1820
Hölscher, J. F. M., 959
Höök, O., 335
Hoffman, G. L., 1268
Hofstetter, J. R., 1722
Hogan, M. J., 2321, 2322
Hoge, R. H., *40
Hohf, R. P., 2305
Holaday, D. A., *1985, *2245
Hollister, L. E., 964
Holmes, J. H., 1414
Holowach, J., 955
Holtz, F., 115
Hood, R. M., 944
Hooper, J. W., Jr., 466
Hopp, E. S., *748
Horner, F. A., 118
Hosier, D. M., 1941
Hotchkiss, L. D., 933
Hottinger, A., 461
Hoxie, J., *1439
Huang, M. H., 447
Hughes, E. S. R., 1701
Hultengren, N., 961
Hunter, J. S., Jr., *985
Huppert, V. F., *1839
Hurst, J. W., 1939
Hurst, V., 1826
Hussey, H. H., *72
Hyde, J. S., 1718
Hyman, A. S., 1154

I

Ikkala, E., 2196
Iklé, A., 459
Innerfield, I., 124
Iversen, K., *156
Iverson, H. A., 345

J

Jabbour, J. T., 1581
Jackson, B. B., 445, 2065
Jackson, R. L., *42
Jackson, W. P. U., 1701
Jacobs, L. G., 1949
Jacoby, J., *1959
Jaffe, M. O., *2264
Jagt, T., *156
James, C. L., 825
James, L. S., *1985
Jarcho, L. W., 2058
Javid, M., 1814
Jenko, V. A., *177
Jönsson, G., 961
Jørgensen, K. S., 713
Johnson, E. A., *1
Johnson, E. W., *1306
Johnson, G. T., 459
Johnson, J., 1815
Johnson, P. C., 1814
Johnson, P. M., 971
Johnstone, R. T., *1844
Jones, B. W., 1579
Jones, E. G., 829
Joseph, S. I., *1330
Judd, E. S., 111
Judd, W. H., *99
Juniper, K., Jr., 127
Justin-Besançon, L., 442

K

Kaeser, H. E., 1938
Kalz, F., 1413
Kamieth, H., 1586
Kanee, B., 1812
Kanof, N. M., 2318
Kapian, S., 1941
Katz, M., *1003
Kaufman, J. M., 338
Kay, A. W., 1708
Kay, E. B., 946, *1767
Kay, S., 458
Kaye, H., *275
Kazansky, V. I., 1824
Keats, A. S., 1289
Keene, C. H., *1851
Keligren, J. H., 109
Kelly, E. W., Jr., 2073
Kelly, P. J., *388
Kelly, T., *1178
Kenis, Y., 347
Kennedy, B. J., 2325
Kennedy, R. J., 1283
Kerr, D. N. S., 1939
Kerr, F. W. L., *868
Kessel, J. F., 345
Ketchel, M. M., *399, *404
Keuter, E. J. W., 1938
Kidera, G. J., *1188
Kieriand, R. R., *2264
Kiesewetter, W. B., 1711
Killip, T., III, 321
Kinder, C. H., 2320
King, H., 114
King, R. B., *868
Kirkpatrick, J. E., *1864
Kittle, C. F., *2006
Kittredge, W. E., *758
Klatskin, G., 1811
Kleiman, A. H., *1633
Klein, M. D., *237
Klein, R., 1718
Klein, R. I., *1008
Knuth, W. P., *177
Knutson, D. L., *257
Körtge-Stöppler, S., 1285
Kohn, A. J., 1702
Kolars, C. P., *2213
Koning, J. H., 1803
Kottke, F. J., *2253
Kottmeier, H. L., 1273
Kove, S., *860
Kragh, L. V., 2304
Krall, L. P., 835
Kramer, D. W., 2181
Kranendonk, O., 1275
Krčílková, M., 2062
Krebs, C., 1939
Kremer, K., 1706
Krieger, J. S., 1276
Krugman, S., 1281
Krumperman, L. W., *2249
Krusen, F. H., 319
Kulczycki, L. L., 1699
Kunin, C. M., 2071
Kunstadter, R. H., *1008
Kuntz, R. E., 1282
Kushner, D. S., *277, *1013, *1778

L

Laborit, H., 840
Lagergren, C., 130
Laha, P. N., 1577
Lamb, L. E., *1200, *1623
Lamm, H., 1154
Lamy, M., 464, 1278
Lanes, A. S., *2004
Lang, E. K., 2076
Lang, W. R., 457
Lange, H. F., 1415
Lange, K., *377
Lapresle, J., 827
Lapshina, N. P., 1711
Larmon, W. A., 954
Laros, C. D., 2312
Larrea R., P., 1946
Larsen, R. D., 966
Lassen, U. V., 2196
Lathem, W., 215
Lavigne, J., 1816
Lawrence, J. H., 443
Leader, A. J., *995
LeCompte, P. M., 2199
Lee, L. W., *2098
Leighninger, D. S., *2110
Leikin, S. L., 958
Le Meilleur, J., 110
Lemmen, L. J., 450
Leonard, M. H., *175
Lerch, V., *1871
Leuchtenberger, C., 223
Levere, A. H., 711
Levi, G., 110
Levine, S. A., 1818
Levitt, S. H., *35
Lewis, B., 131
Lewis, F. J., 445
Li, Min Chui, 1416
Li, P'ei-Kuang, 1578
Lian, C., 323
Lichter, M. L., *1131
Liener, A., 468
Lierle, D. M., 1721
Lindsay, D. G., 2073
Lipsett, M. B., *845
Littin, E. M., *1755
Littman, D., 352
Livingston, S., 463
Livingstone, P. D., 2195
Ljunggren, E., 1414
Llaurado, J. G., 826
Lloyd, J. R., 462
Locket, S., 1582
Long, P. L., Jr., *1226
Longino, L. A., 1279
Lorber, J., 958
Louis, J., *1880
Louw, S., 457
Lowrey, G. H., 1278
Lucchesii, P., 834
Ludbrook, J., 1709
Luhr, J., 2194
Lundeen, E. C., *1008
Lunseth, J. H., 2180
Lusvarghi, E., 2200
Lyons, J. B., 1700
Lyttle, S. M., 1826

M

McArthur, C. E., *1740
McCammon, R. W., *1440
McCarthy, K. L., *2101
McCausland, A., 1271
McConkey, B., 954
McDonald, R. R., 451
McFarland, R. B., 714, 965
McGanity, W. J., *2138
MacGillivray, I., 2069
MacHaffie, R. A., 1823
McHardy, G., *1868
Maciver, I. N., 2062
McKay, D. G., 1936
McKay, J. W. 2179
McKelvey, J. L., *1
McKittrick, L. S., 693
McMahon, F. G., *1208
MacMahon, H. E., 968
McNeer, G., 331
Macy, D., Jr., *2010
Macy, I. G., *2265
Madsen, S., *156
de Maeyer, E., 104
Magid, G. J., *35
Magovern, G. J., *365
Maksim, G., *1431
Malach, M., 213
Malashock, E. M., *2098
Malherbe, W. D. F., 952
Malhotra, R. P., 1575
Malkasian, G. D., Jr., *985
Maloney, J. V., Jr., *1604
Mande, R., 324, 1715, 1720
Mann, C. H., 814
Marchand, R., 2314
Marchis, E., 126
Marin, R. B., 1803
Marinacci, A. A., *1377
Marks, J., *1450
Marquardsen, J., 828
Martin, M. M., 957
Martini, G., 2069
Martins da Silva, M., *1
Mason, A. S., 2308
Mason, L. W., 2183
Masson, G. M. C., 2076
Master, A. M., 2324
Mathieu, P. L., Jr., 121
Matt, J. G., 2311
Matthes, F. T., 2317
Matthews, E. C., 1708
Matthews, W. A., 332
Mattson, S.-B., 2298
Maurer, E. R., *2013
Mayberger, H. W., 120
Mayer, E., *169, 1810
Mayo, C. W., 114
Meagher, J. N., *868
Meiss, J. H., 1290
Meliette, R. R., *1220
Mendez, F. L., Jr., *2013
Merendino, K. A., *1759
Merlo, G., 330
Meacon, H., *2004
de Meulemeester, F., 712
Meyer, H., 219
Michelsen, C., 2196
Middlebrook, G., 1685
Mijer, F., 221
Mikkelsen, W. P., 949
Miller, C. L., *393
Miller, W. C., Jr., *1220
Millhon, W. A., *2260
Milloy, F., Jr., 823
Milner, W. A., 467
Mintz, A. A., 1277
Mitchell, E. H., *2008
Moertel, C. G., 111
Moeschlin, S., 1158
Mohler, D. N., 1264
Moir, R. S., *2218
Moldover, A., 2182
Molinatti, G. M., 1947
Monro, J. A., 1275
Moore, D. C., *1334
Moore, T. C., 2307, 2308
Moraes, P. de V., 711
Morra, C., 2070
Morrison, M., *1008
Morrow, C. S., 2298
Morrow, R. C., 124
Moschidis, C., 959
Moser, L., 1413
Motley, H. L., *2054
Movitt, E. R., 106
Mowlem, A., 330
Muehlberger, C. W., *1359
Müller, F., 341
Müller, W., 1288
Mueller, W. S., 436
Mulinos, M. G., *1839
Mulligan, R. M., 348
Murphy, E. S., 469
Murray, I., 2074
Murray, J. E., 2190
Murray, M. J., *2104
Myers, H. I., 1288

N

Najarian, J. S., 950
Natale, P., 349
Naulleau, J., 344
Naumann, P., 469
Nazzaro, P., 325
Neimeier, R., 1817
Nelson, D. H., 1158, *2130
Nelson, S. W., 1949
Nesbitt, R. E. L., 1586
Neu, H. N., *1610
Neubert, H., 2306
Neyhart, A. E., *2209
Neyman, D. S., *717
Ngai, Shih-Hsun, *2245
Nisbet, H. I. A., 2317
Nitka, H. F., 130
Nitschke, A., 2193
Nogueira, C., *1767
Nogués, A. E., 712
Nolasco, J. B., 1403
Noordijk, J. A., 455
Norbury, F. G., 1712
Nordøy, S., 1818
Noring, O., 449
Norman, L. O., 955
Nugent, F. W., *2260
Nunn, J. F., 974
Nyhan, W. L., 1716

O

O'Brien, E. N., 443
O'Conor, V. J., Jr., 1944
Odom, G. L., *2087
O'Gara, R. W., 223
Ohtomo, A., 813
Okhotsky, V. P., 1825
O'Lane, J. M., *2226
Oliva, L., 1725
Oliver, M. F., 439
Olshin, I., 1281
Opinsky, M., *1224
dalle Ore, G., 956
Oren, B. G., *2128
Orr, L. M., *1686
Osserman, E. F., 1585

Overbeck, L., 238
Overman, J. R., 2061
Owren, P. A., 1163

P

Pacini, R., *27
Paerregaard, P., 1721
Page, I. H., *1989
Pallette, E. C., *20
Palmer, C. E., 355
Palmer, E. D., 105, 1702
Paniagua, G., 108
Parfentjev, I. A., 1724
Parmley, L. F., 113, 1823
Parravicini, M., 124
Partington, P. F., 452
Patel, T. B., 1725
Patrick, B. S., *24
Patt, H. H., 113
Paul, R. N., 112
Paxton, H. D., *755
Pecora, D. V., 446
Peery, T. M., 1810
Pelaez, J., 321
Pennell, R. B., *309
Perkins, F. T., 118, 1164
Perloff, J. K., 325
Perna, V. P., *1648
di Perri, T., 975
Perry, H. M., Jr., 2300
Pessar, T., 324
Petty, C. S., 2199
Phelan, J. T., *1299
Picard, R., 1264
Picchio, E., 131
Pick, A., *2124
Pickroth, G., 2070
Pielage, J. H. W., 823
Pines, B., 953
Pitney, W. R., 442
Plaa, G. L., *1760
Pliego, J., 1710
Plotz, C. M., *180
Plum, F., *1302, 2067
Politano, V. A., 1821
Pollak, V. E., 1704
Polner, W., *194
Pool, T. L., *854
Popper, H., *2235
Porter, R. R., 2195
Portugal, J. R., 2190
Powell, N. B., 960
Prader, A., 2193
Prato, V., 215, 216
Prem, K. A., *1
Pretorius, P. J., 223
Price, E. B., *845
Priest, E. M., 821
Pryse-Davies, J., 443
Puestow, C. B., 217
Putnam, C., *1178
Pyle, H. M., *399

Q-R

Quick, A. J., 820
Rachmilewitz, M., 106
Radushkevich, V. P., 1711
Randall, W. C., 444
Rapoport, C., 1581
Rappaport, I., *169
Raskin, H. F., 440
Rathod, N. H., 2068
Ratzenhofer, M., 1276
Ravitch, M. M., 2310
Ray, E. H., *395
Reed, H., 1937
ReMine, W. H., *985
Renold, A. E., *2130
Reyes Oliveros, F., 220
Reynolds, A. H., 1716
Rhoads, P. S., *1398
Riberi, A., 839
Rich, M., *2128
Richards, L. S., *2104
Richards, R. L., 439
Richardson, A. C., 2312
Richterich, R., 2194
Riddle, M., 126
Riis, P., 1700
Rijken, J. P., 953
Rissel, E., 2301
Risser, J. C., 328
Roberts, E., 1946
Robertson, A. L., 1585
Robertson, R. W., 217
Robie, T. R., 1802
Robins, R. B., *2243
Robinson, P. L., *1630
Rochelle, J. B., III, *410
Rodger, J. R., *2215
Rodó, J. E., 437
Rogue, F. T., 2300
Rose, I. W., Jr., 945
Rosenberg, B. A., 213
Rosenberg, S. A., 1943
Rosenfeld, J. E., *1224
Rosenfeld, S., 813
Rosenthal, H. L., *409
Rosenthal, J., *561
Ross, J., Jr., 823
Ross, R. R., *273
Rosselli, M., 970
Rossi, B., 1699
Rossi, M., 1584
Roth, R. B., 191
Rowen, B., *1190
Rowntree, L. G., *411
Rubbo, S. D., 1286
Rubin, A., *498
Rubin, H., 1271
Ruge, D., 1705
Rullo, F. R., *743, *890
Ruys, A. C., 963
Rydén, A., 1161
Ryssing, E., 1942
Rytand, D. A., *762

S

Sabety, A. M., 1267
Sabiston, D. C., Jr., 329
Sadusk, J. F., Jr., *2121
Sage, H. H., *496
Salsano, D., 1287
Sampayo, R. L., 1282
Samuel, B., *268
Santos, C. S., *1977
Satter, E. J., 2321
Sauer, W. G., *139
Savill, A., 2319
Sayman, W. A., *1735
Scalabrino, R., 1948
Scalia, S. P., 224
Scarabicchi, S., 827
Scarborough, R. A., *1324
Schaal, J. A., *2013
Schaefer, L. E., 1950
Schär, M., 219, 220
Schalm, L., 2061
Schell, H. W., 963
Schellen, A. M. C. M., 1578
Scherr, M. S., *1996
Scheuer-Karpin, R., 1265
Schiavetti, L., 1576
Schlager, K., 1817
Schless, G. L., 128
Schmid, P. C., 1810
Schmidt, W.-E., 448
Schneierson, S. J., *1003
Scholten, P., *1171
Schon, M., 2310
Schreier, A. J., 354
Schreiner, G. E., 820
Schroeder, H. A., 1697
Schuler, D., 1412
Schulte, J. W., *2094
Schulz, R., *248
Schwartz, C. J., 975, 1585
Schwartz, M., 943
Scott, M., 2190
Segal, A. E., 465
Segal, R. L., 346
Segaloff, A., 2297
Seletz, E., *1750
Seizer, A., *762
Serbin, A. F., *1224
Sexton, A. W., *1440
Shanbrom, E., *33
Shapiro, S. W., 2306
Sharp, J., 2303
Sheehan, S., 455
Shelokov, A. I., *264
Shepherd, G. R., 1459
Sherman, W. B., *1866
Shih, Y. C., 1713
Shnider, B. I., *1882
Shuford, W. H., 971
Shull, H. H., 2297
Shvedova, A. N., 1717
Shwachman, H., 832
Sia, C. C. J., 1412
Sicard, A., 127
Sicher, K., 353
Siddall, J., *1959
Sieber, W. K., 2072
Sieracki, J. C., 2199
Siliquini, P. N., 2191; (correction) 2282
Simons, H. C. R., 955
Singer, J. M., *180
Skorneck, A. B., 108
Slighter, R. G., *2257
Slipyan, A., *147
Slobody, L. B., *377
Smart, R. H., *2054
Smith, C. H., 2074
Smith, C. M., 2068
Smith, E. K., *489
Smith, I. M., 2179
Smith, J. A., *1747
Smith, J. L., *891
Smith, M. E., 2200
Smith, W. A., 1684
Smithwick, R. H., 1159
Smyth, N. P. D., 447
Snijder, J., 2299
Snyder, C. S., 1269
Snyder, F. F., 120
Soave, F., 965
Soboleva, N. I., 464
Sokal, J. E., *1314
Solarz, S. D., *2124
Sommers, S. C., 970
Sones, F. M., Jr., 2063
Soulié, P., 1270
Spath, F., 1706
Spencer, F. C., 822
Spigland, I., 440
Spina, G., 1945
Spink, W. W., *2213
Spitznagel, J. K., 827
Spohn, R., 1408
Sprague, C. C., 224
Springall, A. N., 521
Sprofkin, B. E., 826
Stamler, J., 976, 976
Stanford, W. R., 838
Staples, O. S., *730
Stapp, J. P., *1744
Star, S. A., *1735
Starer, F., 214
Stavem, P., 1938
Stearns, G., *1655
Stein, I. F., Sr., 1714
Steinberg, I., 973
Steinhausen, T. B., *1983
Stephenson, K. L., 1711
Stern, K. F., 837
Stewart, M. J., 328
Stoelting, V. K., *393
Stovall, W. D., *243
Strough, L. C., *1747
Stuhl, 1824
Stuteville, P., *1445
Sullenberger, J. W., *725
Sultanian, I. V., 132
Summerfield, A., *370
Sunada, K., 1291
Sunshine, I., *514
Surgenor, D. M., *404
Sweet, R. B., *1977
Syverton, J. T., *1
Szanto, P. B., *277, *1013, *1778
Szilagyi, D. E., 2305

T

Talbot, H. S., *1595
Talbott, J. H., 2302
Talice, R. V., 350
Tanaka, K. R., 438
Taple, J., 2188
Tasman, A., 712
Tatelman, M., 352
Taylor, F. W., 2198
Taylor, W. C., 340
Tehan, T., *1178
Teilum, G., 1813
Tejada, C., 945
Thal, A. P., *2104
Thaysen, J. H., 1275
Thedieck, C. G., *40
Thelen, H. M., *179
Therien, R. C., *2098
Thibault, P., 943
Thomas, E. W., 812
Thomas, G. I., *1759
Thomas, J. W., 966
Thompson, I. M., *881
Thompson, M. E. M., 969
Thompson, W. V., 521
Thoms, H., 1803
Thorn, G. W., *2130
Tiffeneau, R., 1588
Tinajero Ayala, R. G., 940
Tinch, R. J., *399, *404
Tipner, A., 1459
Tørning, K., 1284
Tóth, L., 122
Townsend, E. H., Jr., *1983
Treves, N., 1940
Trimpi, H. D., 2307
Tsimbler, I. V., 342
Tudor, R. B., 930
Tullis, J. L., *399, *404
Turner, E. L., 1459
Turner, R. F., *1359
Tweeddale, D. N., 1812
Tyler, H. R., 1270
Tyrrell, D. A. J., 1410

U

Ulin, A. W., *1971
Ullery, J. C., 1714
Underwood, B., *1000
Utz, J. P., *264

V

Vaccato, A. E., 950
Vail, D., 2322
Valberg, L. S., 2180
Valentine, G. H., 460
van Buchem, F. S. P., 1698
van Creveld, S., 1812, 1819
van der Veen, J., 2077
van Geertruyden, J., 217
van Zeben, W., 833
Vastine, R. J., Jr., *1185
Veling, W. F., *753
Verhulst, H. L., *717
Verlinde, J. D., 956, 956, 1825
Vermeulen, A., 1406
Vernier, L. R., 1942
Vivell, O., 1412
Vivien, J. N., 325

W

Waingortin, E., 823
Walcher, D. N., 1941
Walker, J. C., 329
Walker, J. S., 951
Wallace, H. M., *2253
Wallenstein, S., 1708
Walsh, J., 1809
Walton, E. W., 1404
Ward, L. E., 836
Ward-McQuaid, J. N., 824
Waring, G. W., Jr., *2004
Warkany, J., *2020
Warshaw, L. J., 710
Wasserman, E., *377
Wassner, J., 1407
Wassner, U. J., 952
Watson, W. C., 468, (correction) 1146
Watson-Williams, E. J., 1822
Watt, J., 2316
Watts, M. S. M., *268
Waugh, J. M., 451
Weaver, W. T., *725
Weber, R. W., *1346
Webster, J. E., 334
Webster, J. R., Jr., *1214
Weicksel, P., 1724
Weirich, W. L., 822
Weisbrot, I. M., *1985
Weiss, M. M., Jr., *17
Weiss, M. M., Sr., *17
Weiss, S., 216
Welch, C. M., *1959
Welch, H. C., 463
Welch, K., *1445
Welsh, R. I. H., 1698
Wenger, J., 441
Werkö, L., 1575
Wessel, H. U., *1214
Wester, M. R., *2249
Westland, J. C., 334
Westman, A., 2313
Wheatley, G. M., *856
White, K. L., *1617
Wiggins, W. S., 1459
Williams, B., 962
Williams, C. E., 2074
Williams, E., 1271
Williams, P. L., 2318
Wilson, H. T. H., 465
Wilson, J. T., 2187
Wilson, M., 1944
Wilson, T. M., 1285
Wilt, J. C., 339
Winchell, H. S., *1971
Winer, L. H., 2073
Winge, K., 448
Winslow, W. A., 946
Winter, W. J., *411
Witham, M., 465
Wittson, C. L., *1747
Witz, W., *1608
Wolf, B. S., 128
Wolfson, B., 1417
Wollheim, E., 1700
Womack, N. A., 2192
Wood, M. W., 1272
Woodbury, R. A., 1259
Worthen, H. G., 121
Wright, K. J., *177
Wróblewski, F., *860
Wylie, E. J., 2077
Wynn, S. K., *154

Y

Yeh, T. T., 1707
Young, R. K., *24
Young, W. P., *1299
Youngblood, R. W., 2183
Yuen, C. K. S., 1411

Z

Zagnoni, C., 2304
Zaikin, M. D., 348
Zalessky, G. D., 967
Zarafonetis, C. J. D., 940
Zdansky, E., 1719
Zeller, R. W., *2263
Zheutlin, N., *33
Zhorov, I. S., 1417
Ziegler, E. E., 1260
Ziperman, H. H., 453
Zlatkind, E., *1427
Zorini, A. O., 834
Zorn, H., 1274
Zunin, C., 838

INDEX TO PAGES

OF THE JOURNAL, ACCORDING TO WEEKLY ISSUES—VOLUME 168, SEPTEMBER-DECEMBER, 1958

Pages	No.	Date
1- 138	1	September 6
139- 228	2	September 13
229- 364	3	September 20
365- 488	4	September 27
489- 716	5	October 4
717- 844	6	October 11
845- 984	7	October 18
985-1170	8	October 25
1171-1298	9	November 1
1299-1426	10	November 8
1427-1594	11	November 15
1595-1734	12	November 22
1735-1838	13	November 29
1839-1958	14	December 6
1959-2086	15	December 13
2087-2208	16	December 20
2209-2334	17	December 27

INDEX NUMBER (V.167): September 13 **CLINICAL MEETING NUMBER: October 25** **INTERNSHIP AND RESIDENCY NUMBER: October 4**

EDUCATION NUMBER: November 15

Extra copies of the index are available without charge from the Order Department, American Medical Association, 535 N. Dearborn St., Chicago 10.

FOR CONTROL OF MENORRHAGIA

ENOVID®

Prolonged or excessive menstrual flow of functional origin can be treated both therapeutically and prophylactically with Enovid.

The supportive action of two tablets of Enovid on the endometrium usually checks abnormal bleeding within six to twelve hours. A daily dosage of one or two tablets is then continued through the intermenstrual interval until day 25 of the cycle. The patient will menstruate approximately three days after discontinuance of therapy.

She is again treated with similar doses from day 5 to day 25 for two or three additional consecutive cycles.

A similar regimen is employed if the patient is seen during the intermenstrual interval. Even though no bleeding is present a dosage of one or two tablets daily is administered until day 25. Therapy is resumed from day 5 to day 25 for two or three successive cycles.

Each tablet of 10 mg. contains 9.85 mg. of norethynodrel, a new synthetic steroid, and 0.15 mg. of ethynylestradiol 3-methyl ether. G. D. Searle & Co., Chicago 80, Illinois.

ENOVID Oral Synthetic Endometropin
(brand of norethynodrel with ethynylestradiol 3-methyl ether)

SEARLE | *Research in the Service of Medicine*

BREACH THE INFLAMMATORY WALL

ACCELERATE TISSUE REPAIR

The wall of leukocytes and fibrin that surrounds every site of inflammation breaks down when Parenzyme is administered systemically and/or topically.
Parenzyme depolymerizes macromolecules trapped in the capillary wall and connective tissue – permits access of anti-infective agents, accelerates tissue repair, resolves inflammation and edema.

PARENZYME® AQUEOUS
PARENZYME®-B (*buccal tablet*)
PARENZYME® OINTMENT

Parenzyme *Aqueous* – sterile multiple-dose vials containing lyophilized trypsin, 25 mg. plus 5 ml. of aqueous diluent. **Parenzyme-*B*** – buccal tablet containing 5 mg. trypsin. **Parenzyme *Ointment*:** containing 2 mg. crystalline trypsin, 6 mg. crystalline chymotrypsin and 2 mg. 9-aminoacridine hydrochloride in a specially prepared water-soluble base.

Products of Original Research

NATIONAL

THE NATIONAL DRUG COMPANY
Philadelphia 44, Pa.

PAIN Zactirin®

Ethoheptazine Citrate with Acetylsalicylic Acid, Wyeth

for everyday pain control . . .

for your many patients requiring potent analgesia but not an injected narcotic

Proved by extensive evaluation[1,2,3] in 1998 patients in diverse areas of medicine and surgery, including:

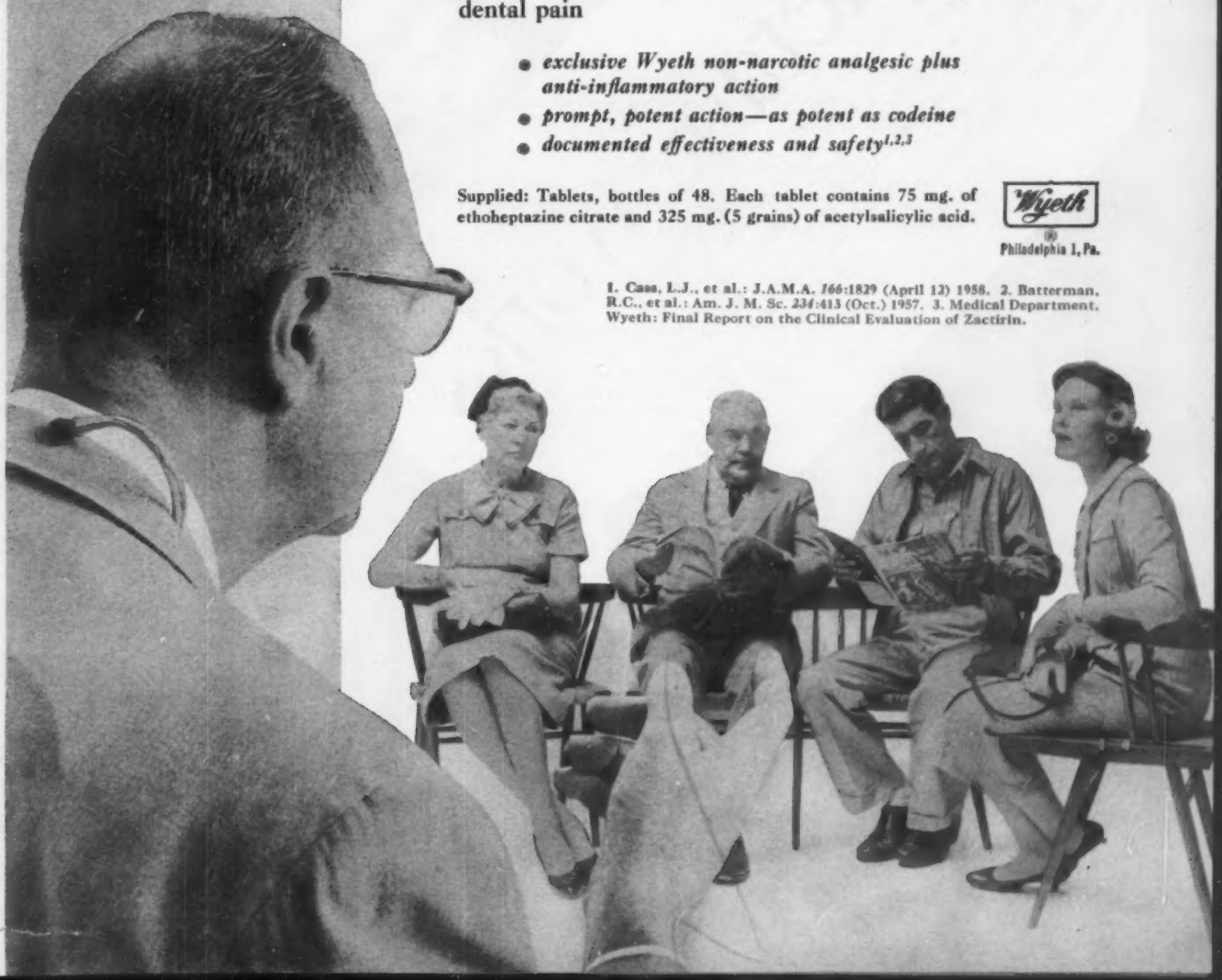
arthritis, bursitis, early metastatic carcinoma, fibrositis, grippe, herpes zoster, ligamental strain, low back pain, menstrual pain, myalgia, myositis, neuritis, pleurisy, postoperative pain, postpartum pain, sciatica, trauma, dental pain

- *exclusive Wyeth non-narcotic analgesic plus anti-inflammatory action*
- *prompt, potent action—as potent as codeine*
- *documented effectiveness and safety[1,2,3]*

Supplied: Tablets, bottles of 48. Each tablet contains 75 mg. of ethoheptazine citrate and 325 mg. (5 grains) of acetylsalicylic acid.

Wyeth®
Philadelphia 1, Pa.

1. Cass, L.J., et al.: J.A.M.A. *166*:1829 (April 12) 1958. 2. Batterman, R.C., et al.: Am. J. M. Sc. *234*:413 (Oct.) 1957. 3. Medical Department, Wyeth: Final Report on the Clinical Evaluation of Zactirin.



allergic

SNEEZE

Dimetane® works

(PARABROMOTLAMINE MALEATE)

Whatever the allergic symptom, Dimetane will provide unexcelled antihistaminic potency and minimal side effects. Dimetane often works in certain cases where other antihistamines fail. For your next patient with allergic rhinitis prescribe Dimetane Extentabs® (12 mg.), Tablets (4 mg.), Elixir (2 mg./5 cc.), new Dimetane-Ten Injectable (10 mg./cc.) or new Dimetane-100 Injectable (100 mg./cc.). A. H. Robins Co., Inc., Richmond 20, Va. / Ethical Pharmaceuticals of Merit Since 1878

Robins

CLASSIFIED ADVERTISEMENTS

Personal classified advertising rates are **$7 for ads of 30 words** or less and 25c each additional word in regular type or **$8.75 for 30 words** and 30c each additional word in bold face type. There is also a 45c charge made on the first insertion of an ad when a box number is used and answers sent care of AMA. Count 4 additional words for a box. Commercial classified advertising rates are **$9 for ads of 20 words** or less and 30c each additional word in regular type or **$11.25 for 20 words** and 40c each additional word in bold face type. Commercial rates cover all ads of manufacturers, dealers, agencies, etc. Box number charge same as personal ads.

CLASSIFIED ADS ARE PAYABLE IN ADVANCE FORMS CLOSE 15 DAYS PRIOR TO DATE OF ISSUE

Journal A.M.A., 535 N. Dearborn St., Chicago 10

NOTICE

POST-DOCTORAL TRAINEESHIP IN NEUROPHARMACOLOGY—Available for the MD or Ph.D who would like to broaden his training and enter research in neuropharmacology; stipends from $4,500 per year plus dependent allowances; post-doctoral fellowships in other areas such as biochemical pharmacology, antibiotics, energy and drug enzymology are also available. Write: Chairman, Department of Pharmacology, Washington University School of Medicine, 4577 McKinley Avenue, St. Louis 10, Missouri.

VACATION ON A FAMOUS MONTANA RANCH — Nine Quarter Circle has a history dating back to 1892; located 7 miles from the northwest corner of Yellowstone Park in limitless expanse of primitive wilderness; this cattle, horse and dude ranch is the home of friendly and informal westerners; we're hosts to all age groups, families especially invited with special rates; planned activity for the children and Kiddie Wrangler for the Wee Tots; excellent trout fishing; everyone has their own horse for a thrill into the Montana Rockies; a reputation for wholesome food served family style; pack trips and rodeos; barbecues, outdoor trout frys, square dancing; references gladly exchanged; season June 1 to September 15; big game hunting in the Fall for elk, deer, bear, moose and mountain sheep. Write for literature to: Howard & Bonnie Kelsey, Nine Quarter Circle Ranch, Gallatin Gateway, Montana.

ELECTROCARDIOGRAPHIC SERVICE; ELECTROcardiograms interpreted; for full information write to: The Louisville Diagnostic Service, 422 West Florence Avenue, Louisville, Kentucky (14).

RESIDENCIES WANTED

ANESTHESIOLOGY RESIDENCY AT SECOND YEAR level; recently completed approved first year; desire to start February first; U. S. born and Class A graduate. Box 7264, % AMA.

PHYSICIANS WANTED

PHYSICIAN — FOR MEDICAL DEPARTMENT OF progressive pharmaceutical company; duties, establishing and supervising clinical research projects throughout country; involves 60-90 days travel a year; previous experience of this nature desirable; company located in small growing community in semi-rural vacation land area of central New York state; forward resumes of training, experience, salary desired to Personnel Director, Eaton Laboratories Division, The Norwich Pharmacal Company, Norwich, New York C

VACANCIES — SENIOR PHYSICIANS WITH MINImum of three years psychiatric experience; excellent opportunities for advancement; salary rate $7,320 to $10,200 depending upon applicant's training and experiences annual increments; nominal deduction for complete family maintenance; fully approved large eastern mental hospital with three year accredited residence training progress; must be eligible for licensure in Connecticut. Box 7253 C, % AMA.

LOS ANGELES AREA; PSYCHIATRIST; VACANCIES in new Veterans Administration Hospital; affiliated with three medical schools; opportunity for individual and group therapy also research; salary $9,890 thru $13,970 plus 15% specialty allowance. Contact: Manager, Veterans Administration Hospital, Sepulveda, California. C

PATHOLOGIST—PRESENTLY HAVE OPENING FOR MD or DVM pathologist; position is Chief of Pathology Section of Research Laboratories; experience in toxicology desired; salary open; forward resumes of training, experience, salary required to: Personnel Director, Eaton Laboratories Division, The Norwich Pharmacal Company, Norwich, New York. C

PSYCHIATRIST—FULL TIME AND/OR PART TIME teaching positions available; part time arrangement may be associated with private practice; a teaching grant coordinator needed. Contact: F. G. Gilliick, MD, Dean, Creighton University School of Medicine, Omaha 2, Nebraska. C

STUDENT HEALTH SERVICE — PHYSICIAN DEsired immediately; full time; health service or general practice experience necessary; salary to $10,000; send training, experience, personal background. Dr. Otto J. Keller, Director, Health Service, Northern Illinois University, DeKalb, Illinois. C

INDUSTRIAL PHYSICIAN — ATTRACTIVE OPPORtunity to join the industrial staff of a large scientific laboratory located in a delightful resort area of New Mexico; will consider industrial or general experience; must be citizen of United States. Write: Box 7254 C, % AMA.

ANESTHESIOLOGIST—QUALIFIED ANESTHESIOLogist for well equipped, modern, progressive New Jersey hospital; excellent opportunity; salary open. Box 7134 C, % AMA.

(Continued on page 247)

When ordinary food must be supplemented

Patients like Meritene

ULCERS and other restricted diets, as in liver diseases and gall bladder conditions.

POST-OPERATIVE and other nutritionally depleted patients, such as geriatrics, prolonged convalescence, and chronic illnesses.

TOTAL FEEDING, whether by tube or orally, in conditions such as wired jaws and cancer of the oral cavity.

The good-tasting protein-vitamin-mineral supplement

MAIL COUPON FOR ONE LB. CAN

FREE!

THE DIETENE CO.
Highway 100 at W. 23rd St.
Minneapolis 16, Minnesota

Please send me *free* a 1-lb. can (regular $1.98 retail size) of Meritene protein-vitamin-mineral supplement.

Name_____

Address_____

City_____ Zone____ State_____

MA 1109

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

535 N. Dearborn St., Chicago 10, Ill.

Phone WH 4-1500 Cable Address "Medic" Chicago

SUBSCRIPTION RATES

Price per annum in advance, including postage: Domestic, $15. Canadian, $17.00. Foreign, $21.50. Price to students, interns and residents: $9.00 in U. S. & possessions.

SINGLE COPIES of this and previous calendar year, 45 cents each.

REMITTANCES should be made by check, draft, registered letter, money or express order. *Currency should not be sent unless the letter is registered.* Stamps in amounts under one dollar are acceptable. Make all checks, etc., payable to "AMERICAN MEDICAL ASSOCIATION."

WARNING: Pay no money to an agent unless he presents a letter showing authority for making collection.

CHANGE OF ADDRESS: When there is to be a change in your address, THE JOURNAL or any other A. M. A. periodical to which you subscribe should be notified at least six weeks before the change is made. The address label clipped from your latest copy of the periodical, and the old and new address, including your postal zone number, should be included in the new address. Your instructions should state also whether the change of address is temporary or permanent.

WHEN COMMUNICATIONS concern more than one subject—manuscript, news items, reprints, change of address, payment of subscription, membership, information wanted, etc.—correspondents will confer a favor and will secure more prompt attention if they will write on a separate sheet for each subject.

CONTRIBUTORS

EXCLUSIVE PUBLICATION: Articles are accepted for publication on condition that they are contributed solely to this journal.

COPYRIGHT: Matter appearing in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION is covered by copyright. Permission will be granted on request for the reproduction in reputable publications of anything in the columns of THE JOURNAL if proper credit is given. However, the reproduction for commercial purposes of articles appearing in THE JOURNAL or in any of the specialty journals published by the Association will not be permitted.

MANUSCRIPTS: Manuscripts should be typewritten, double-spaced and the original, not the carbon copy, submitted unrolled. Carbon copies, or single-spaced manuscripts will not be considered. Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. Because of lack of space, it is necessary to limit the number of bibliographic footnotes to eighteen. Unused manuscripts are returned by regular mail. *Used manuscripts are not returned.*

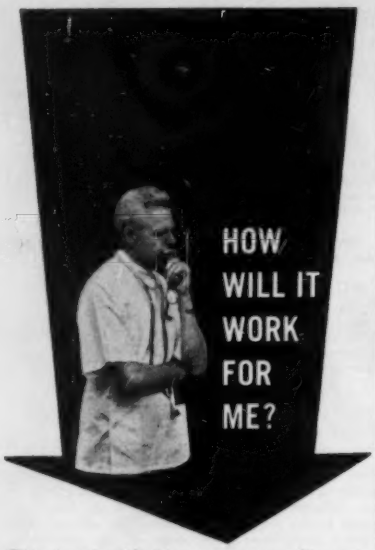
RESPONSIBILITY FOR STATEMENTS: While manuscripts are subject to editing so that they conform to the style adopted by the American Medical Association for its publications, the author assumes the responsibility for the statements he makes. Unless so stated, the opinions expressed in articles in THE JOURNAL do not represent those of the American Medical Association or any other organization.

ILLUSTRATIONS: Half-tones and zinc etchings will be furnished by THE JOURNAL when satisfactory photographs or drawings are supplied by the author. Each illustration, table, etc., should bear the author's name on the back. Photographs should be clear and distinct; drawings should be made in black ink on white paper. Used photographs and drawings are returned after the article is published.

PRICE LIST

A price list describing the various publications of the Association will be sent on request.

AMERICAN MEDICAL ASSOCIATION
535 N. DEARBORN STREET, CHICAGO 10



This is a justifiable query regarding any form of therapy. Products with excellent clinical reports often fail when measured by the yardstick of day-to-day practice.

To supplement clinical and laboratory investigations, Unitensen and Unitensen-R were supplied to 1,988 physicians who report the following results in treating 21,132 hypertensive patients.

PROOF IN PRACTICE

NO. OF PATIENTS	RESULTS	PERCENT
6,553	EXCELLENT	31.0%
10,843	GOOD	51.3%
2,703	FAIR	12.8%
1,033	UNSATISFACTORY	4.9%

(TOTAL NUMBER OF SIDE EFFECTS: 638, 3.0%)

These data *prove* that Unitensen affords well tolerated, dependable office management for the majority of hypertensive patients. Unitensen lowers blood pressure . . . improves renal and cerebral blood flow . . . exerts no adverse effects on circulation . . . and, is virtually free of serious side effects.

UNITENSEN®

Each Unitensen tablet contains: Cryptenamine (tannates) 2.0 mg.

UNITENSEN-R®

Each Unitensen-R tablet contains: Cryptenamine (tannates) 1.0 mg., Reserpine, 0.1 mg.

For prescription economy, prescribe in 50's.

Clinical supplies available on request.

Neisler

IRWIN, NEISLER & CO. • DECATUR, ILLINOIS

TONICS AND SEDATIVES

• • •

My Favorite Story

In this space will be published anecdotes submitted by physicians concerning their practice or people in general. Contributions for "My Favorite Story" are welcome.

It happened in Los Angeles. A drunk who wanted to go to El Paso climbed on a bus which was about to leave. Immediately he started to make a nuisance of himself.

After arguing with the man for several minutes, the driver lost his patience. "Okay, mister," he said, "you're either quiet or this bus isn't leaving for San Francisco!"

"San Francisco?" mumbled the drunk. "I don't want a San Francisco bus." And he scrambled out the door.

The driver turned, winked at his passengers, and the bus left for El Paso.

•

As the crowded elevator descended, Mrs. Jones became increasingly furious with her husband, who was delighted to be pressed against an attractive blonde. When the elevator stopped at the main floor, the blonde whirled, slapped Mr. Jones, and said, "That will teach you to pinch."

Bewildered, Mr. Jones was half way to the parking lot when he said, "I didn't pinch that girl."

"Of course you didn't," said his wife. "I did."

When Lincoln was captain of the "Bucktail" Rangers, he was as ignorant in military matters as his company was of drill and tactics. On one occasion his troop, marching in platoon formation, was confronted by a fence. Captain Lincoln had no idea of the proper order, but his wit did not desert him. "Company dismissed for two minutes," he snapped. "At the end of that time, fall in on the other side of the fence."

•

Quotes of the Week

June is the month when unmarried girls like to be well groomed.

•

Junk is something you keep for 10 years and throw away two weeks before you need it.

(Continued on page 246)

FLY *SAS*
to every
EUROPEAN CONGRESS

Enjoy a holiday, too . . .
extra cities at no extra fare!

WHEREVER the medical congress in Europe or around the world — you enjoy a bonus of extra cities on *SAS* that could include London, Paris, Rome, Brussels, Copenhagen!

TRAVEL IS A SPLENDOR on *SAS*, with DC-7C speed, radar smoothness, Continental cuisine, and spacious berths in first class. Outstanding comfort and service in Economy Class.

FLY *SAS* transatlantic from New York or transpolar from California. Or go one way, return the other.

See your travel agent

FIRST OVER THE POLE
SAS
SCANDINAVIAN AIRLINES SYSTEM

M-1

SAS, 638 Fifth Avenue, New York 20, N.Y.

YES . . . send me

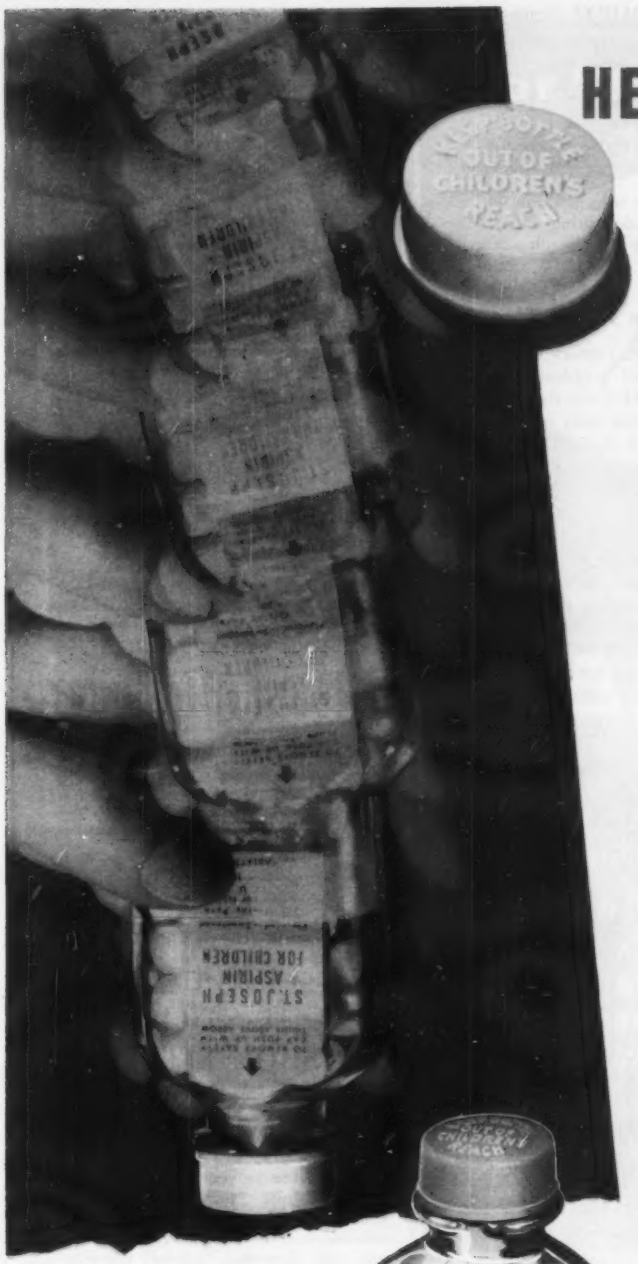
☐ **Programs of medical congresses and seminars abroad.**

☐ **Travel folders and automatic Plan-A-Trip Kit.**

Name_____

Address_____

City_____ State_____



HERE IS A SAFETY CAP

that assures 100% closure every time!

Yes! It's a fact! The new Safety Cap on St. Joseph Aspirin For Children never gets loose—never falls off. It absolutely assures 100% closure of the bottle. And it affords maximum protection against young children either accidentally or purposefully opening the bottle.

Doctors recognize and appreciate the importance of this new Safety Cap—just as they have, for many years, recognized and appreciated the value of St. Joseph Aspirin For Children. For each of these specialized tablets contains 1¼ grains of highest quality aspirin—the dosage most widely accepted by doctors.

In addition to its preferred dosage, the pleasant orange flavor and smooth, creamy texture make St. Joseph Aspirin For Children an elegant pharmaceutical that children readily accept without hesitancy, fuss or fretting.

For these reasons—as well as because aspirin is the most widely used drug in the world, and one of the safest and most effective drugs in the entire range of medicine—St. Joseph Aspirin For Children is an aspirin of choice whenever salicylate therapy is indicated in infancy and childhood.

Plough also makes St. Joseph Aspirin—a 5 grain adult tablet made to unusually high standards of purity, potency and uniformity. Thus, St. Joseph Aspirin For Children and regular adult St. Joseph Aspirin form a "family aspirin pair" that covers the aspirin needs of every member of the family. You can recommend this "family aspirin pair" with complete confidence.

TO REMOVE SAFETY CAP PUSH UP WITH THUMB ABOVE ARROW
ST. JOSEPH
ASPIRIN
FOR CHILDREN
Flavored—Sweetened
1¼ Grains Pure Aspirin per tablet. (¼ equal U. S. P. five grain tablet.)
50 TABLETS—39¢
Plough, Inc.

A palatable aspirin tablet of unique excellence

Plough, Inc. NEW YORK · MEMPHIS · LOS ANGELES · MIAMI

"very useful as basic wet therapy"

Senear, F. E. and Haeberlin, J. B., Jr.: M. Clin. North America, March, 1958, pp. 489-496.

AVEENO
Colloidal Oatmeal
COLLOID BATHS
soothing, relief promoting and antipruritic in the acute, inflammatory eczemas

"the best therapeutic approach is one which hydrates and lubricates the skin."

Burgoon, C. F., Jr., and Burgoon, J. S.: Geriatrics 13: 391 (June) 1958.

AVEENO "OILATED"
Colloidal Emollient Baths
(35% emollient oils plus colloidal oatmeal)
quickly relieves dry skin dermatitis, senile pruritus, winter itch, bath itch and chronic eczemas

AVEENO® Colloidal Oatmeal is available in 18 oz. and 4 lb. boxes.

AVEENO® "OILATED" is available in 10 oz. cans.

AVEENO CORPORATION NEW YORK
Pioneers in Ethically-Promoted Colloid Baths

TONICS AND SEDATIVES *(Continued)*

Kindness is something you can't give away. It always comes back.

•

The ladies' sewing circle is a place where more husbands are darned than socks.

•

A joint account is an account where one person does the depositing and the other the withdrawing—usually husband and wife.

•

Did You Know That?

Even in the 18th century women drivers posed a perpetual problem. During the reign of Louis XVI it was the fashion for a woman to drive her own carriage on the crowded streets of Paris. This created the perennial traffic jams, very little different from today.

The king directed one of his ministers to have this stopped. The minister was faced with a difficult problem. He stood to lose his position by issuing such an order as many of the ladies had great influence in court. The task required tactful handling.

With a master stroke of genius he solved the dilemma by proclaiming the following ordinance: "Ladies under 30 years of age are forbidden to drive carriages."

The Insult Gratuitous

The "last word" has usually been an honor accorded to women. However among our humorists, the last word is often a punch line which in many cases adds insult to injury.

A frowning woman walked up to a little boy she had caught smoking. "Does your mother know you smoke?" she demanded.

"Lady," countered the lad. "does your husband know you stop and talk to strange men on the street?"

•

The following advertisement appeared in a small-town newspaper, "The man who picked up my wallet on Main Street was recognized. He is requested to return it."

The next day this reply was published, "The recognized man who picked up your wallet requests the loser to call for it."

(Continued on page 248)

SPECIFY FELSULES
7½ gr. Hypnotic Dose
3¾ gr. Tranquilizing Dose
THE ORIGINAL CHLORAL HYDRATE CAPSULES

LYCORAL
PERMITS FLEXIBLE DOSAGE
NON-ALCOHOLIC PALATABLE
10 gr. Chloral Hydrate per teaspoonful

NON-BARBITURATE HYPO-ALLERGENIC
Fellows Testagar
MEDICAL MFG. CO., INC.
pharmaceuticals since 1866
Detroit • Dallas • Los Angeles

OUR ELEVENTH YEAR IN THESE COLUMNS

. . . DISCUSSING FOOT STRAINS and SHOE FITTINGS

Persistent foot fatigue and related discomfort sometimes tie back to chronic foot-strains . . . and to patient's individual shoe-fitting problems. Individually fitted from 248 styles and sizes, Cuboid Shoe Inserts, when worn in any sensible shoe, are designed to "break in" and take form that "adapts" the shoe to the plantar area of the patient's foot.

Burns Cuboids have been prescribed by physicians for as long as 22 years. The product has been advertised to you in these columns for the past ten years.

A special data sheet describing the functions of Cuboid Shoe Inserts is available to doctors on request.

BURNS *Cuboids*
BURNS CUBOID CO.
Established 1936
P.O. BOX 658 • SANTA ANA, CALIFORNIA

(Continued from page 243)

OUR 63RD YEAR

WOODWARD MEDICAL PERSONNEL BUREAU
FORMERLY A.N.D.S.
185 N. Wabash-Chicago, Ill.

Founders of the counseling service to the medical profession, serving medicine with distinction over half a century.

ADMINISTRATION: (y) 850 bed, long term, county institution; to $15,000 plus excl MNTCE; Mid-So.
ANESTHESIOLOGY: (a) Assoc w/Anes, hd of dept; 300 bed, fully-apprvd, med-schl-affild, county hsp; inter'd tchg & rsrch; $15,000; SW. (b) Chief; 200 bd, genl, vol, JCAH, tchg hsp; fee-for-serv; SE.
DERMATOLOGY: (q) Hd dept; new post; 23 man grp, mostly Dipls w/academic appts; own well-equip'd bldg; excl JCAH, med-schl-affil'd hsps; W.
FOREIGN: (u) Med Dir; amer devl corp, asiatic country; req's MD & MPH degrees & exper; $20-25, 000; trvl pd. (v) Indus phy; ass'n 28 man grp; prtnr 2 yrs; Pacific Island.
GENERAL PRACTICE: (t) Assoc w/well-estab'd GP; tremendous pract; 10 rms, 2 RN's; serv 2 excl hsps; sal 18 mos; then prtnr, increas'g 50-50; costal city, Calif. (u) Assn, 4 man GP grp; $12,000 1st yr; 1/5 net, 2nd; then prtnr; one mo. vac; SW. (v) Assoc 2 GP's; one retiring; busy indus, surgical & genl pract; shld net $20,000 yr; Mich.
INDUSTRIAL MEDICINE: (s) Med Dir; new post; div. impor co; 5,000 emplys; capable develop'g & direct'g comprehensive indus med prog; $12—15,000; Fla. lic. req'd. (t) Chief Surg; mining corp, 8,000 emplys; facils, 2 hsps; $20-25,000; 2 yr contract, renewable; 1 mo vac; pd travel; So. Amer.
INSURANCE MEDICINE: (n) Asst Med Dir; bureau Emplys' Hlth, lge insur co; pref w/inter Int Med; E.
INTERNAL MEDICINE: (g) Assn, 7 man grp; to $20,-000; prtnr, 3rd yr; MW. (t) Chief; 30 man dept; great responsibility involving tchg residents, rsrch prog, & specialty Clin Pract; excl lge grp; facils, 350 bd, fully-apprvd hsp; Calif. (u) Endocrinologist; assn 23 man grp, mostly Dipls ME.
OALN: (t) Oph; Assoc w/Bd Oph, FACS; $18,000; prtnr, 2 yrs; nr Los Angeles. (u) Oph; Hd dept; 11 man grp; own bldg; facils 120 bd, JCAH hsp; Dipl, $15,000; So. Atlan. (v) Oto; 8 mos, majority Dipls; $20-25,000; profit-participation, 2nd yr; MW.
OB-GYN: (x) Hd dept; 4 man grp; oppor $20,000, 1st yr; no investment; So. Calif. (y) Assoc w/2 Obgyns; excl ofc & lab; sal 1st yr; then prtnr, nett'g about $45,000 yrly; coll town, So. Atl.
ORTHOPEDICS: (k) Assn w/Bd Ortho, FACS; very active pract; req's one able assume increasg load, inter'd in bldg own fine pract; about $20,000; 2nd yr, ½; full prtnr, 3rd; nr Boston. (l) Assn 30 dr grp; guar $18,000, excl potential; Calif. (m) Hd dept; 10 Dipl grp; early prtnr; Pac NW.
PATHOLOGY: (n) Clinical; Hd dept; 100 bd, genl, vol, JCAH hsp; oppor over $20,000; nr lge city, E. (o) Assoc w/Bd Path; $20,000; excl city, Calif.
PEDIATRICS: (o) Assoc w/Ped; $15,000 start; fine oppor for excl prtnrshp; E. (p) Assoc w/Dipl; new bldg; $1,000 mo; prtnr later; nr San Francisco. (q) Assn w/newly-formed cl grp; $19,000 if Dipl; yrly increases & special benefits; Coll twn, SE.
PHARMACOLOGY: (o) Med Dir; imper natly-known labs; pref w/exper, pharm wk; direct cl investigations relating to prod development; $18,000; MW.
P & N: (i) Assn 5 man grp; staff, excel 80 bd priv mental institution; $15,000 plus full-maintenance; excl M.D.'s home, located wooded area on Lake; MW. (m) Neuro; clin dir, supervise entire med staff; lge State institution; to $17,000; MW.
RADIOLOGY: (j) Dipl, qual to estab isotope lab; dept now grossing $70,000—can be increased; 200 bed, vol, genl, JCAH hosp; No. Central. (k) Dipl w/Isotope trng; Dir dept, fully-apprvd, 250 bd, vol, genl hsp; $25,000 guar; nr med schl, E.
STUDENT HEALTH: (f) Serve hlth cntr, lge univ; plus rsrch or tchg; $12,000; mo's vacation; W.
SURGERY: (t) Hd dept; 7 man grp; $15-20,000; prtnr 2nd; med cntr, MidE. (u) Chief, vol, genl JCAH hsp, expndg; 4 man grp; one well-qual'd abdom, gync, trama wk; will net to $22,000; NW.
TUBERCULOSIS MEDICINE: (z) Control Ofc; new post; wk under Health Ofc; challenging oppor; SW.
UROLOGY: (n) Hd dept, 10 Dipls, expndg to 20 men; oppor $20-25,000; early prtnr; Florida.

PLEASE SEND FOR AN ANALYSIS FORM SO WE MAY PREPARE AN INDIVIDUAL SURVEY FOR YOU

We offer you our best endeavors—our integrity—our 62 year record of effective placement achievement

STRICTLY CONFIDENTIAL

INTERNIST — DIPLOMATE OR BOARD ELIGIBLE; 312 bed GM&S affiliated hospital near Dallas; salary $9,890 to $13,058; housekeeping quarters, retirement, insurance, leave benefits; citizenship required. Apply: Manager, Veterans Administration Hospital, McKinney, Texas. C

WANTED—GENERAL PRACTITIONER TO TAKE OVer unopposed practice which will gross about $60,000 this year in west Texas town; twenty five bed hospital with offices in hospital building. Contact: Box 7236 C, % AMA.

GENERAL PRACTITIONER OR INTERNIST AS FULL time partner with special interest in physical therapy; who would like to join in building physical therapy units and a convalescent hospital. Franz Pohl, MD, 900 S. Walnut, Anaheim, California. C

WANTED—AMERICAN BOARD SPECIALISTS; PHYsicians interested in group or private practice; teaching research, public health or industrial medicine; National and international services. Our 62nd Year. Woodward Medical Bureau, 185 N. Wabash Avenue, Chicago. C

DOCTOR WANTED—FOR THRIVING SAN FRANCISco-Oakland area of California; new medical-dental building needs general practitioner and specialists; suites available at once; six months free rent. Box 6780 C, % AMA.

WANTED — INTERNISTS, BOARD CERTIFIED OR Board eligible if well qualified; must be United States citizen; foreign graduates eligible if on approved list. Write: Manager, Veterans Administration Center, Wadsworth, Kansas. C

for "This Wormy World"

Pleasant tasting

'ANTEPAR'® brand
PIPERAZINE

Eliminate **PINWORMS IN ONE WEEK**
ROUNDWORMS IN ONE OR TWO DAYS

'ANTEPAR' SYRUP — Piperazine Citrate, 100 mg. per cc.
'ANTEPAR' TABLETS — Piperazine Citrate, 250 or 500 mg., scored
'ANTEPAR' WAFERS — Piperazine Phosphate, 500 mg.

Literature available on request

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

GENERAL PRACTITIONER, INTERNIST, TO WORK with psychiatric patients in 681 bed neuropsychiatric hospital; salary open; depending upon qualifications; citizenship required; quarters available. Manager, Veterans Administration Hospital, Fort Lyon, Colorado. C

PEDIATRICIANS—2 OR 3 PART TIME TEACHING positions; may engage in private practice for remainder of time. Contact: F. G. Gillick, MD, Dean, Creighton University School of Medicine, Omaha 2, Nebraska. C

IMMEDIATE OPENING FOR GENERAL PRACTItioner starting at $1,000 with raises according to qualifications. Contact: R. A. Bussanarger, MD, New Riverview Hospital and clinic, Raymond, Washington. Phone 90. C

PEDIATRICIANS WANTED—TWO OBSTETRICIANSgynecologists; desire one or two pediatricians to associate with them in new building; salary open or separate practice. Box 7262 C, % AMA.

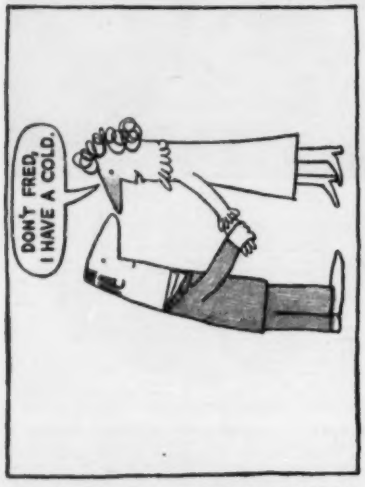
WANTED — GENERAL PRACTITIONER TO ASSIST me in the general practice of medicine; surgery, obstetrics in a 35 bed privately owned hospital; salary $1,000 per month; golden opportunity for the right man. Box 7199 C, % AMA.

WANTED—THOROUGHLY QUALIFIED PHYSICIAN for general practice and industrial work; must have Ohio state license and be affiliated with an academy of medicine in Ohio or some other state. 200 Republic Building, Cleveland 15, Ohio. C

LOUISIANA — NEW ORLEANS AREA; OPENINGS available for staff psychiatrists in modern, 492 bed state psychiatric hospital currently in process of own research division as well as advanced clinical facilities and integrated program with Tulane and Louisiana State University Medical Schools; applicants must be under 50 years of age, eligible for licensure in Louisiana and have completed at least 1 year's residency training; salary range for psychiatrists who have completed formal residency training is $10,800 to $15,000 depending on qualifications and additional experience; hospital is located in pine forests of southeast Louisiana directly opposite beautiful Fontainbleau State Park; furnished housing on hospital grounds available; Greater New Orleans Expressway stretches 24 miles across Lake Pontchartrain providing speedy access to a cosmopolitan city. Apply to: Dillon J. Blount, MD, Superintendent, Southeast Louisiana Hospital, Mandeville, Louisiana. C

WANTED — GENERAL PHYSICIANS; UNDER 35 years of age; full time hospital practice, opportunity to develop interest, consultation with specialists available in professional care program of 10 Miners Memorial Hospitals; full time positions with starting compensation at the rate of $12,000 per year; progressive pay scale; for appointment currently and for July 1959; U. S. citizenship and eligibility for licensure in Kentucky, Virginia, or West Virginia required. For details, address: The Clinical Director, Miners Memorial Hospital Association, 1427 Eye Street, N. W., Washington 5, D. C. C

(Continued on page 250)



© 1959, SCHERING CORPORATION, BLOOMFIELD, NEW JERSEY. ALL RIGHTS RESERVED. EACH TABLET CONTAINS CHLORPROPHENPYRIDAMINE PLUS APC. CM-J-799

TONICS AND SEDATIVES *(Continued)*

Beatrice Lillie once attended a garden party wearing the famous Peele pearls. She was approached by a lady of great pretensions who remarked, "What lovely pearls. I suppose they're real?"

Lady Peele indicated that they were, and the woman continued, "Of course, you can always tell by biting them. Let me try."

"Certainly," said Lady Peele, "but you can't tell real pearls with false teeth."

•

Anecdotes

The teacher was hearing the class in mathematics. "In order to subtract things," she said, "they have to be in the same denomination. For instance, you can't take three bears from four rabbits or eight pears from ten peaches."

Most of the pupils nodded their heads, but one boy raised his hand inquiringly.

"Yes?" said the teacher.

"Well," said the boy, "couldn't you take three quarts of milk from two cows?"

•

An aspiring author sent a manuscript to an editor with a letter in which he stated, "The characters in this story are purely fictional and bear no resemblance to any person, living or dead."

A few days later he received his manuscript back with a penciled note, "That's what's wrong with it."

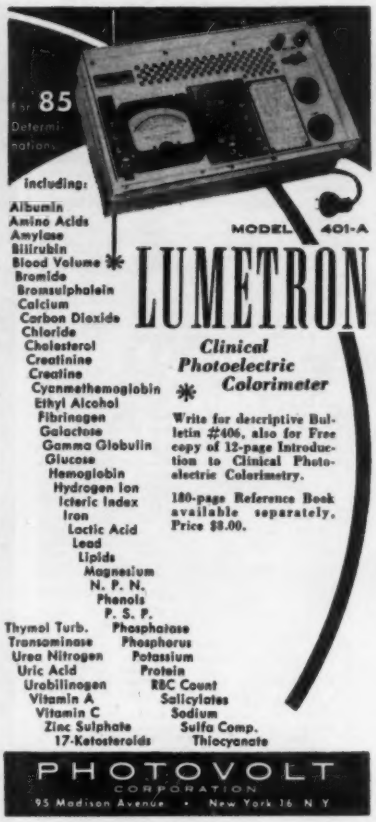
•

A businessman visited his banker and asked, "Are you worrying about whether I'll be able to meet my note that comes due next month?"

"Yes," replied the banker. "I must admit that I am somewhat concerned."

"Good," said the man, "That's why I'm paying 6% interest."

—D. D.



Now available

SCHIZOPHRENIA

Leopold Bellak, M.D., *editor*

- The world's latest, most authoritative findings. Over 4,000 studies distilled and integrated into chapters to shed new light on this formerly baffling disorder.
- Virtually an encyclopedia of schizophrenia . . . a comprehensive clinical guide . . . an invaluable textbook.

Over 1,000 pages **$14.75**

From your bookseller or

LOGOS PRESS: Box 273, Cooper Station, N.Y.C. 3

"I've had virus epidemics among my staff before—but never anything as bad as this one!"

JUST WHAT THE DOCTOR ORDERED...FOR BLAND DIET PATIENTS

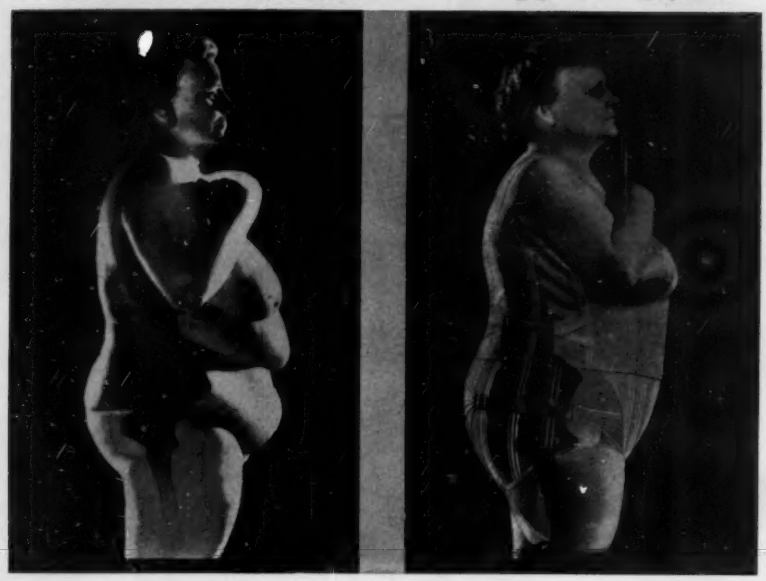
Instant Malt-o-Meal, hot wheat cereal, helps relieve the monotony of bland diets. Its unique double flavor—sun-ripened wheat and toasted malt—perks up lagging appetites. Natural sodium content is 3 mg. per 100 grams (*no sodium added*); and fiber content in *only* ½%. Malt-o-Meal is enriched with B vitamins and iron. Added wheat gluten provides additional protein, too.

WHEN RECOMMENDING CEREAL... SUGGEST "MALT-O-MEAL"

Malt-o-Meal Company, 1212 Foshay Tower, Minneapolis 2, Minnesota

CAMP SUPPORTS FOR OBESITY

help relieve back strain by bringing the weight more in line with the supporting joints



In obese persons with a pendulous abdomen, the forward displacement of the center of gravity results in increased lumbar lordosis and painful strain on the muscles and joints of the lower back. Later results are drooping round shoulders and increased strain on the feet and lower extremities. The fasciae of the abdominal wall is stretched in instances of pendulous abdomen and the muscles atrophied. Also, the power of the abdominal wall to retain the viscera in position is diminished and the latter have a tendency to lie at a lower level than normal. The lowered viscera are attached to the diaphragm, thus the diaphragm, too, comes to lie at a lower level. In some patients it has been noted that this condition leads to shortness of breath and disturbances of circulation. Camp obesity supports are scientifically designed to encircle the pelvis and establish a foundation to hold up the pendulous abdominal wall and support the viscera in a more normal position, thus returning the center of gravity toward its proper position over the supporting skeleton of the pelvis and lower extremities.

Patients benefit not only in relief from fatigue but get a psychological lift from the cosmetic improvement.

S. H. CAMP and COMPANY CAMP Jackson, Michigan

(Continued from page 247)

WANTED—PHYSICIAN QUALIFIED AND EXPERIenced in general medicine for employment with the United States government; the position is located in Washington, D. C., but applicant must be willing to travel occasionally as well as accept assignment overseas; must be United States born citizen; graduate of Class A U. S. medical school; under 45 years of age, and have completed military obligation; salary $10,130 per annum; additional allowance if assigned overseas; include all pertinent data in initial reply. Box 7033 C, % AMA.

PHYSICIAN INTERESTED IN PULMONARY DIseases for 170 bed state supported tuberculosis hospital; established 3 years; active surgical program, out-patient service, x-ray and laboratory; consultants in all branches, U. S. citizenship and Alabama medical license or eligibility therefore required; salary $8,500 to $9,500 depending on qualifications; quarters to be made available. Apply: Medical Director, Sixth District Tuberculosis Hospital, 800 St. Anthony Street, Mobile, Alabama. C

PHYSICIANS WANTED — QUALIFIED PHYSICIANS needed to work with psychiatric patients in 2,400 bed hospital near Chicago; salary range $6,505 to $13,970 depending upon qualifications; plus 15% additional if Board Certified not to exceed $16,000; approved three year psychiatric residency in conjunction with Northwestern University; citizenship required. Write: Manager, Veterans Hospital, Downey, North Chicago, Illinois. C

POSITIONS AVAILABLE FOR PHYSICIANS WITH United States Government; must be willing to serve in the United States; or on two year assignment overseas; must be U. S. born citizen; graduate of U. S. Class A medical school; well qualified in general practice of medicine; under 45 years of age, and have completed military obligation; salary $10,000 per annum; additional allowances while assigned overseas; initial reply must provide summary personal, professional, and military background. Box 6857 C, % AMA.

PSYCHIATRISTS WANTED — PSYCHIATRISTS (3) for employment with the United States Government desiring career opportunity to work in a clinical setting as well as active research program in close association with well qualified psychiatrist in a small unit offering individual attention; must be Board eligible; under 45 years of age; United States born citizen, graduate of Class A medical school; salary $10,130 to $11,595 per annum; include summary: personal, professional and military background. Box 6697 C, % AMA.

PSYCHIATRIST — SUPERINTENDENT; DAVIDSON County Hospital; an 850 bed psychiatric treatment facility in suburban Nashville, is seeking psychiatrist-superintendent to direct the work of its capable staff; which includes 6 physicians, 3 psychologists, 5 social workers, and business manager; should be Board Certified or Eligible; salary competitive; extras include complete family maintenance in 3 bedroom modern home on hospital campus. Apply to: L. F. Vantrease, 825 8th Avenue, South, Nashville, Tennessee. C

SHAY MEDICAL AGENCY

55 E. Washington Street
Chicago 2, Illinois
Service of Distinction since 1914

ASSOCIATE MEDICAL DIRECTOR: Pharmaceutical, Canada, clin invest. & duties of med serv dept, cons traveling; sal open; applicants should have exp in int med, therapeutics and/or pharmacology
GENERAL PRACTICE: (a) Alaska clin of 5; $12,000 up, pract est 30 yrs; good hosps, unlimited future (b) assn w/man of 44 doing int med & ped est 15 yrs; at least $1000 start, future prtnrshp, Ill (c) active clin sm town Ill; $1000 1st 6-mos; $1200 2nd 6-mos; prtnrshp in 1-yr
INDUSTRIAL: F/T plant phys, motor corp, Mich, 8-hr day, $900 & fringe benefits
INSURANCE: asst med dir, SW, Mon-Fri, sal open
INTERNIST: Ky clin of 6, $12,000, prtnrshp 1-yr, genl hosp in comm
MEDICAL DIRECTOR: clin invest relatng to product development; pharm; $18,000 start
OBSTETRICIAN-GYNECOLOGIST: tchng & rsrch w/adm duties, F/T, Ky, $10,000
OPHTHALMOLOGIST: assn, Calif, $1500 mo start; prtnrshp 2-yrs; work w/Bd'd man
PATHOLOGIST: Direct Dept, chge of prof & adm matters, guar $25,000, F/T, 235 bed hosp, 1-ASCP tech & 4-AMT tech, eastern indus comm
PEDIATRICIAN: assn w/bd'd clin man of 30 turning away pts daily, prog comm nr Chgo, finan arrangemnts to be worked out on indiv basis; can make wonderful income
RADIOLOGIST: Tex hosp, carries academic appntmnt w/opptny tchng & resrch, $10-$12,000
RAILROAD: MW, can av $1000 mo, fringe benefits, F/T, perm, 5-days
SURGEON: $1200 start, full prtnrshp soon, assn w/internist, GP & Ob-Ped; ND; excel hosp facil
TUBERCULOSIS: asst med dir, Hawaii, major duties trtmnt & care of tubercular pts, $833 start & hse, laundry, etc.

Upon request one of our applications will be mailed to you. Write us today—a post card will do.

PHYSICIANS WANTED — TO FILL ATTRACTIVE positions in all parts of the United States; distinctive openings; both full and part time; are available in all specialties with industry, institutions; private associations and groups; an application will be mailed to you within 24 hours of your request. Write now to: Miss E. Ronni, Director, National Placement Department, Garland Medical Placement, 25 East Washington Street, Chicago 2, Illinois, Andover 3-0145. C

INDIANA—WANTED; PSYCHIATRIST; BOARD ELIgible; to direct adult and child guidance clinic; team operation; midwest; mixed rural/industrial county of 75,000; half-time; salary to $8,000; other part time and excellent private practice opportunities; open November, 1958; earlier if agreeable; send curriculum vitae, first letter. J. U. Keating, MD, Director, The Guidance Clinic, 224 W. High Street, Elkhart, Indiana. C

OPHTHALMOLOGIST — BOARD CERTIFIED OR qualified; wanted by established 16 man specialty group in Illinois; new airconditioned building in cultured college community; surrounding lakes and preserves for hunting, fishing and boating; salary open but minimum $12,000; plus fringe benefits; including pension plan; partnership after first year with increasing percentage. Box 7241 C, % AMA.

WANTED—INTERNIST; UNDER 35; BOARD QUALIfied; prefer interest in chest disease and allergy but not essential; have had recent coronary and must decrease work load; completely equipped; new, modern office in medical center of 55,000 in east Texas; ideal living conditions; no investment first year; immediate partnership; send complete details first letter. Box 7097 C, % AMA. C

ANESTHESIOLOGIST (2)—BOARD CERTIFIED TO head department; not certified as staff anesthesiologist; 823 bed general hospital; university affiliated; citizenship required; state license in any state acceptable; salary dependent on applicant's qualifications; fringe benefits. Apply to: Dr. Richard J. Ireton, Chief, Surgical Service, Veterans Administration Hospital, Dayton, Ohio. C

WANTED — OPHTHALMOLOGIST; LARGE SOUTHwestern clinic needs Board Certified or Eligible ophthalmologist; opportunity for research and surgery above average; delightful climate; rapidly growing community; excellent educational facilities; university city. Write or phone: E. H. Wood, MD, 4800 Gibson Blvd., S. E., Albuquerque, New Mexico or telephone Alpine 6-9811, extension 260. C

WANTED — PHYSICIANS PSYCHIATRICALLY trained; 1,105 bed Veterans Administration neuropsychiatric hospital dynamically oriented; salary range $9,890 to $16,000 depending upon qualifications; area has excellent educational and cultural opportunities; near Smith College, Amherst College and the University of Massachusetts. Communicate: Manager, Veterans Administration Hospital, Northampton, Massachusetts. C

WANTED—BOARD CERTIFIED ORTHOPEDIC SURgeon; for full time hospital practice in professional care program of the Miners Memorial Hospitals; starting compensation $20,000-$22,000; progressive pay scale. For details address: The Clinical Director, Miners Memorial Hospital Association, 1427 Eye Street, N. W., Washington, D. C. C

YOUNG MD WANTED BY REPUTABLE PHARMAceutical firm in New York for their medical department; work includes evaluation of clinical research, and demands fair knowledge of pharmacology; working knowledge in German desirable; please state age, education, experience, remuneration desired, and availability. Write. Box 7165 C, % AMA.

CALIFORNIA MEDICAL BUREAU AGENCIES—FOR physicians placements and hospitals and medical properties for sale. 405 E. Green Street, Pasadena, California, and 610 S. Broadway Street, Los Angeles 14, California. C

(Continued on page 252)

FROM

"anxious and tense" to "composed and confident"

BUTISOL *sodium*®

butabarbital sodium

Basically sound, a community asset, he is too tense and nervous to function at maximum efficiency.

In common anxiety-tension states, BUTISOL® has been found to produce "satisfactory daytime sedation...with minimal occurrence of untoward reactions."[1]

And BUTISOL does not distort the basic character—it helps the patient adjust to the pressures of an uncertain world and function near a normal level of efficiency.

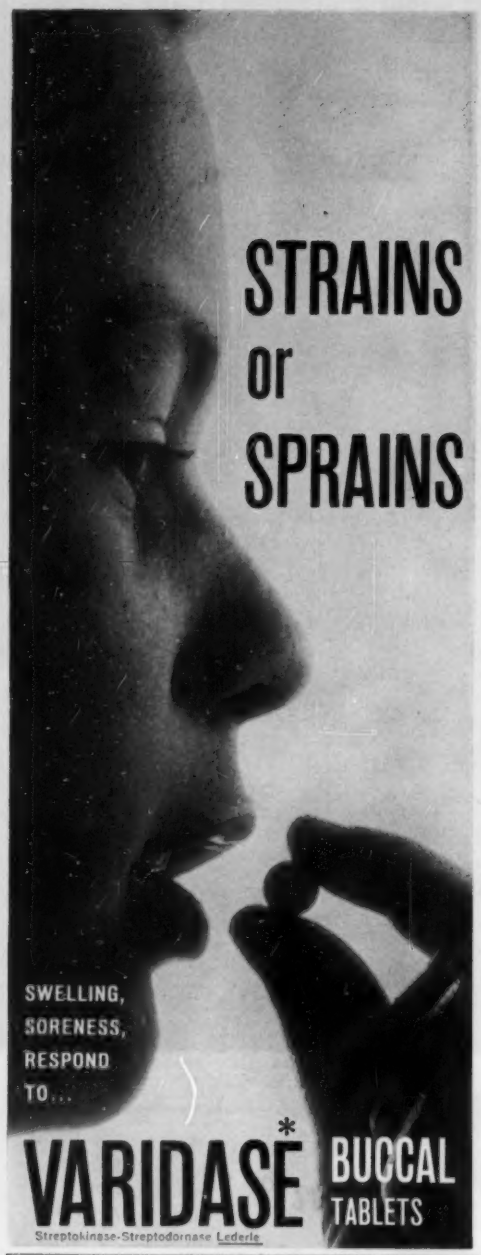
BUTISOL sodium® has a predictable, known action

TABLETS • REPEAT-ACTION TABLETS • ELIXIR • CAPSULES

McNEIL

1. Grossman, A. J.; Batterman, R. C., and Leifer, P.: Fed. Proc. *17*:373 (March) 1958.

McNEIL LABORATORIES, INC. • PHILADELPHIA 32, PA.



• REDUCE INFLAMMATORY REACTION...SPEED RECOVERY PROCESS

• NOW, SIMPLE BUCCAL ROUTE

ADMINISTRATION: VARIDASE Buccal Tablets should be retained in the buccal pouch until dissolved. For maximum absorption, patient should delay swallowing saliva.

DOSAGE: One tablet four times daily usually for five days. When infection is present, VARIDASE Buccal Tablets should be given in conjunction with an antibiotic such as ACHROMYCIN® V Tetracycline with Citric Acid.

Each tablet contains:
10,000 Units Streptokinase,
2,500 Units Streptodornase.

Lederle

LEDERLE LABORATORIES
A Division of
AMERICAN CYANAMID COMPANY
Pearl River, New York
*Reg. U.S Pat. Off.

(Continued from page 250)

WANTED—BOARD CERTIFIED PEDIATRICIAN; FOR full time hospital practice in professional care program of the Miners Memorial Hospitals; starting compensation $18,000-$20,000; progressive pay scale. For details address: The Clinical Director, Miners Memorial Hospital Association, 1427 Eye Street, N. W., Washington, D. C. C

WANTED — BOARD CERTIFIED OR BOARD ELIGIBLE internist who can qualify as Chief of Service at the Dublin, Georgia, Veterans Administration Hospital; prefer younger to middle-aged man; quarters on station. Contact: Manager, Veterans Administration Hospital, Dublin Georgia. C

WANTED—BOARD CERTIFIED RADIOLOGIST; FOR full time hospital practice in professional care program of the Miners Memorial Hospitals; starting compensation $20,000; progressive pay scale. For details address: The Clinical Director, Miners Memorial Hospital Association, 1427 Eye Street, N. W., Washington 5, D. C. C

GENERALIST—YOUNG; PRIMARY INTEREST MEDicine; to join small group thirty miles southwest Chicago; attractive salary prior to partnership in two years. Contact: Mr. Osmus, Clinic Manager, Hedges Clinic, Frankfort, Illinois. C

GENERAL PRACTITIONER WITH SURGICAL BACKground for surgeon in clinic group associated with hospital in south central Kansas; salary plus. Box 7164 C, % AMA.

WANTED—BOARD CERTIFIED PATHOLOGIST; FOR full time hospital practice in professional care program of the Miners Memorial Hospitals; starting compensation $20,000; progressive pay scale. For details address: The Clinical Director, Miners Memorial Hospital Association, 1427 Eye Street, N. W., Washington 5, D. C. C

LICENSED DOCTOR AND NURSES FOR FINE, small boys and girls camps in Maine from June 28th through August 25th, 1959; doctor's salary is $750 for 8 week period plus food and maintenance; nurses salary is $450 plus food and maintenance for similar period. Box 7195 C, % AMA.

WANTED—GENERAL PRACTITIONER UNDER 38; for association with two general practitioners of same age group; partnership in future. practice situated in a clean, fast growing area of the San Fernando Valley; prefer applicants with some training beyond internship; starting salary $1,400 per month. Direct all replies to: Box 7194 C, % AMA.

INTERNIST WANTED—BOARD ELIGIBLE; NORTH Iowa town; 30,000 shopping center for rich farming and industrial area; association with internist and two surgeons; own building; excellent hospital facilities; $12,000 plus percentage first year; partnership 3 years. Box 4046 C, % AMA.

ANESTHESIOLOGIST TO ASSOCIATE WITH FOUR man group, midwest; private practice; $15,000 to $18,000; early partnership; must have minimum of one year's approved training. Box 7247 C, % AMA.

The Medical Bureau

900 North Michigan Avenue Chicago

ALLERGY: (Y7) To organize & head dept, 35 man clinic increasing to 38; attrac res town near coll town, univ city, MW.
ANESTHESIOLOGY: (B51) Dir dept, new 170 bed hosp recently built at cost of 4½ million; fee-for-service which should net $15-$20,000 1st yr; coll town 100,000, W.
DERMATOLOGY: (D51) Ass'n, Board derm; lge priv pract; coll town near LA.
GENERAL PRACTICE: (F97) Ass'n, 4 man group; plans for expansion to 8 or 10 men; new clinic & hosp; coll town, SW; elev 6000, average temp 72°; min. $12,000. (F98) Ass'n, 4 Board men; drawing area, 35,000, Mich; 10 miles, univ city; new clinic bldg; excel facilities; oppor full partner. (F99) GP with surg training; group ass'n, Houston area; net $1200-$2500. (F100) Foreign assignment; major co; 2 yr contract. (F101) Ass'n, group staffed by 2 Board surgeons, 2 Board internists, 2 GP's; suburb, lge city, NY; min. $10,000, partner oppor.
INDUSTRIAL MEDICINE: (C99) To serve as med dir, 3 plants; helpful if some exp indus med; oppor also for internist qual read cardiograms; salaries in line with exp· Tex.
INSURANCE MEDICINE: (K48) Assoc med dir; oppor becoming director; E.
INTERNAL MEDICINE: (H83) Gastroenterologist; 11 man group; new clinic bldg; town 70,000, noted resort area, SW. (H84) Ass'n, group, 6 internists; busy pract with study & research in arthritis; univ city, SW. (H85) Ass'n, Board internist well estab suburb of NYC on Long Island Sound; partner oppor; July '59.
OBSTETRICS-GYNECOLOGY: (J30) Young ob-gyn interested career in academic med; duties in capacity of teacher, administrator, basic research worker; min $10,000, So. (J51) Head newly estab dept, 7 man group founded '37; town 15,000, recognized vacationland, Minn; med drawing area, 50,000; $14,000 yr; partner oppor.
OALR: (E50) Oph, oto or oph-oto; Board or elig; 17 man clinic; town 70,000, SW; partner oppor; well estab plan for permanent disability, retirement.
ORTHOPEDICS: (K93) Ass'n, orth dept, 28 man group; one of longest estab in Calif; partner oppor. (K94) Ass'n, Board orthepod; lge priv pract; met suburb, N. J., near NYC.
PATHOLOGY: (L8) Assoc to take care of path, 3 days, 225 bed hosp, 2 days, 110 bed hosp; Indiana; % providing excel. income. (L9) Ass'n, 2 Board paths; pref one int clinical path; will spend majority of time at outstanding hosp, delightfully located on Coast, Calif· $20,000.
PEDIATRICS: (M23) Ass'n, 18 man group, Board or elig; univ town, N. Calif; partner status after 2d yr, producing income equal to income of other partners. (M24) Young ped int teaching career; full time; So.
PHYSICAL MEDICINE: (YY1) Dir dept, new 250 bed hosp; univ city, SW.
P & N: (P35) To estab & dir dept of P&N, group of 42 men, all Board or elig; univ city, MW.
RADIOLOGY: (R62) Dir dept, 350 bed gen hosp with 150 bed addition to be completed next yr; fully approved; income providing $25,000 yr; coll town, 40,000, So.
SURGERY: (U38) Ass'n, 3 man surg dept, 17 man group serving major indus co; own 180 bed hosp, JCAH, city, 100,000, MW.
UROLOGY: (W38) Ass'n, Board urologist; lge priv pract; med school city, SW; early partner.

Please send for our Analysis Form.

Burneice Larson DIRECTOR

CALIFORNIA AND WEST COAST APPOINTMENTS open; association, small groups; non-clinical appointments, medical director, hospital directors. We need general practitioners as well as specialists. Continental Medical Bureau, Agency, 510 W. 6th Street, Los Angeles 14. C

WANTED—BOARD CERTIFIED SURGEON; GENERAL practitioner, pediatrician; heart of West Virginia's vacation land; excellent swimming, hunting, fishing; population 12,000; new hospital privileges; good conditions; energetic man should earn $20,000 first year. Box 7098 C, % AMA.

WANTED — GENERAL RESIDENT PHYSICIAN FOR 100 bed short term general hospital, accredited; located in small city near popular seaside resorts; immediate opening; good salary, must have knowledge of English language. Contact: Milford Memorial Hospital, Inc., Milford, Delaware. G. R. Lorenz, Administrator. C

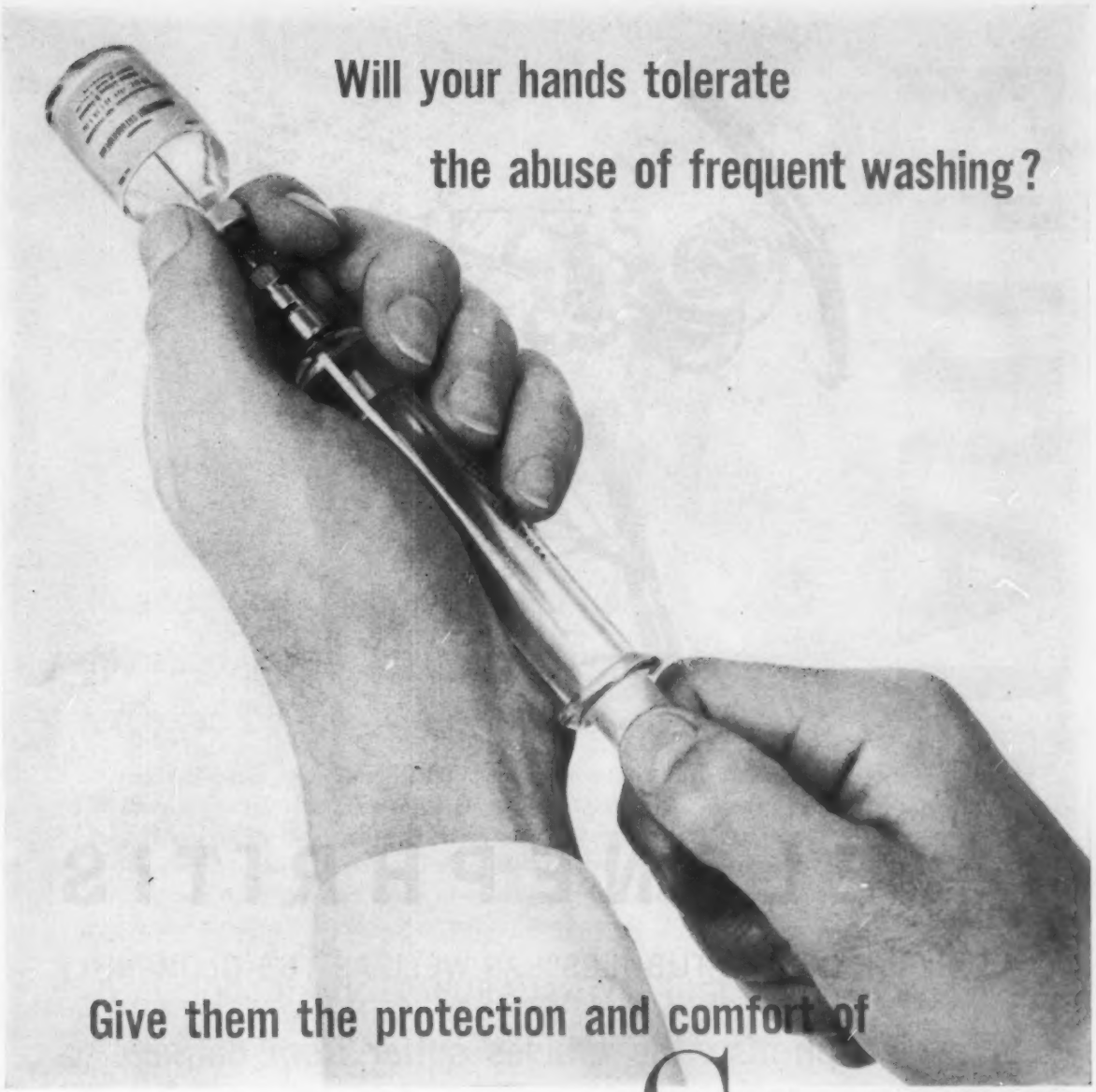
CLINICAL DIRECTOR—LARGE TB HOSPITAL FOR mentally ill; Board Certification or eligibility in internal medicine and experience in chest diseases required; salary $14,000 and up depending upon qualifications; affiliation with medical college possible. Box 7136 C, % AMA.

LOS ANGELES AREA; GENERAL PRACTITIONER; $15,000 annually plus percentage and eventual partnership without investment; to capable doctor; excellent working conditions; give age, education, experience and availability; license required. Box 7250 C, % AMA.

WANTED—IOWA; PSYCHIATRIST TO WORK WITH two Board members in private practice in moderate neuropsychiatric hospital; Board eligible; or one who has recently finished residency; very favorable beginning salary with opportunity for early partnership. Box 7233 C, % AMA.

OPHTHALMOLOGIST — UNIVERSITY TRAINED; Board Certified to head department in large midwestern clinic consisting of Board Certified members only; commensing salary $25,000; plus annual increments; bonuses and life insurance program. Box 7219 C, % AMA.

(Continued on page 256)



Will your hands tolerate the abuse of frequent washing?

Give them the protection and comfort of

MEDICATED Silicare.

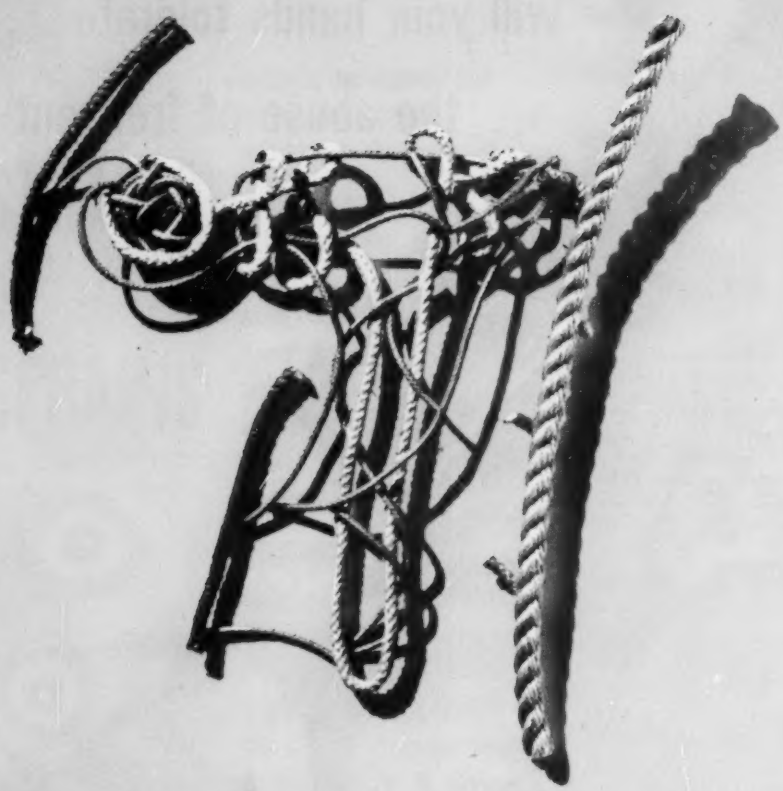
Your hands especially deserve the protective action of Silicare. Just a few applications throughout the day guard against irritation or dermatitis induced by necessarily frequent washing. The literature[1,2] offers convincing proof of its protective properties.

Silicare has a smooth consistency, mild fragrance and leaves no sticky film to impair your manual dexterity. Contains silicone, camphor, menthol, hexachlorophene. Take advantage of Silicare yourself.

1. LeVan, P. *et al.:* Cal. Med. **81**:210 (Sept.) 1954.
2. Salomon, S.L. *et al.:* Ind. Med. & Surg. **26**:474 (Oct.) 1957.

one application protects through several washings

REVLON PHARMACAL DIVISION • NEW YORK, N. Y.



PYELONEPHRITIS

"A DISEASE OF THE TUBULES"[1] AS WELL AS THE GLOMERULI

In pyelonephritis, "the tubules suffer from damage to their lining cells which show cloudy swelling, granular degeneration and diminution in size. Inflammatory cells and colloid casts are found in the lumen of the tubules. Inflammatory cells are present also in the interstitial tissue. The glomeruli remain normal over a long period."[1]

FURADANTIN®

brand of nitrofurantoin

In addition to simple glomerular filtration, FURADANTIN is actively excreted by the tubule cells.

In the treatment of pyelonephritis, it is important to select an agent such as Furadantin which—in addition to its glomerular filtration—is secreted by the tubule cells. On the other hand, it has been demonstrated that sulfonamides, both free and acetylated, are excreted primarily by glomerular filtration,[2] and that "the mechanism of excretion of tetracycline is solely a glomerular filtration process without tubular involvement."[3]

In pyelonephritis . . . FURADANTIN, first

Furadantin "may be unique as a wide-spectrum antimicrobial agent that is bactericidal, relatively nontoxic, and does not invoke resistant mutants. The importance of an agent with these characteristics that could be used for a long period in the treatment of chronic pyelonephritis has been recognized, and it is in this sphere that nitrofurantoin may have its greatest use."[4]

Available as Tablets, Oral Suspension

References: 1. Smith, I. M., and Lenyo, L.: Am. Practitioner 9:78, 1958. 2. Bass, A. D.: Chemotherapy of Bacterial Infections II: Sulfonamides, in Drill, V. A., ed.: Pharmacology in Medicine, New York, McGraw-Hill Book Co., Inc., 1954. 3. Pindell, M. H., et al.: J. Pharm. Exp. Ther. 122:61A, 1958. 4. Waisbren, B. A., and Crowley, W.: A.M.A. Arch. Int. M. 95:653, 1955.

NITROFURANS—a new class of antimicrobials—neither antibiotics nor sulfonamides

EATON LABORATORIES, NORWICH, NEW YORK

AN AMES CLINIQUICK™

CLINICAL BRIEFS FROM MODERN PRACTICE

What differentiates "renal diabetes" (renal glycosuria) from diabetes mellitus?

Blood sugar levels. In renal glycosuria they are normal; in untreated diabetes, fasting blood sugars are usually 130 mg.% or over and postprandial levels 170 mg.%, or more.

Source: Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: The Treatment of Diabetes Mellitus, ed. 9, Philadelphia, Lea & Febiger, 1952, pp. 701-702.

A "URINE-SUGAR PROFILE" FOR CLOSER CONTROL

The new CLINITEST Urine-Sugar Analysis Set contains an improved Analysis Record form that enables even closer control of the *moderate* and the *severe* diabetic. Daily urine-sugar readings may be connected to produce a graph—a day-to-day "profile" that reveals at a glance individual trends and degree of control.

*GP 16:121 (August) 1957.

color-calibrated

CLINITEST®

BRAND

FOR EVEN BETTER CONTROL OF THE MODERATE AND THE SEVERE DIABETIC

a STANDARDIZED urine-sugar test for reliable quantitative estimations "...a most satisfactory method for home and office routine testing."*

AMES COMPANY, INC Elkhart • Indiana Toronto • Canada

60489

(Continued from page 252)

WANTED—GENERAL PRACTITIONER FOR ESTABlished medical group 20 miles north of Pittsburgh; excellent educational program; paid annual and study leave; net maximum starting income $15,000 a year; no investment required. Write: Box 344, Russellton, Pennsylvania. C

WANTED—GENERAL PRACTITIONER; INTERESTED in obstetrics; must be under 45 and have Ohio license; excellent opportunity; open staff hospital; office and records available; please send details in 1st letter. Box 7032 C, % AMA.

WANTED — FACS; OR EQUIVALENTLY TRAINED surgeon willing to do some general practice in well equipped offices; industrial retainer if sale can be consummated right away; two hospitals, metropolitan area of 62,000, Montana. Box 7244 C, % AMA.

WANTED—GENERAL PRACTITIONER FOR 45 BED modern, well equipped hospital and clinic in west Texas to associate with small group; liberal free time and vacation; starting salary $15,000 annually with excellent opportunity for advancement. Box 7030 C, % AMA.

WANTED — INTERNIST WITH ALLERGY AND/OR Cardiology training to take over busy practice immediately; fully equipped with x-ray and EKG; desired location, two open staff hospitals; metropolitan area, Montana. Box 7243 C, % AMA.

EDINBURG, INDIANA—ONE OR MORE GENERAL practitioners for new community built clinic, 5,000 population; good housing; good schools; good community; brochure available. Write: Preston Schaffer, Edinburg, Phone 80 or 189. C

COLORADO — WANTED IMMEDIATELY DOCTOR with, or eligible for Colorado license to conduct an indigent medical care program; salary open. Contact: John S. Anderson, MD, Pueblo City-County Health Department, 151 Central Main, Pueblo, Colorado. C

WANTED—GENERAL PRACTITIONER FOR RURAL community in Michigan recreation area; population 5,000; excellent office and housing facilities available; good roads; hospital affiliation if desired; good schools. Box 7238 C, % AMA.

WANTED—GENERAL PRACTITIONER TO JOIN ESTablished group: southern Colorado Rocky Mountain city; salary open; partnership later; preferably two years hospital training; background information first letter; prompt reply. Box 7251 C, % AMA.

UROLOGIST—UNIVERSITY TRAINED; BOARD CERTified to head department in large midwestern clinic consisting of Board Certified members only; commencing salary $15,000; plus annual increments, bonuses and life insurance program. Box 7220 C, % AMA.

WANTED — OPHTHALMOLOGIST IN NORTHERN midwest with large surgical practice desires well trained associate; salary first year; $18,000; then percentage. Box 6852 C, % AMA.

CALIFORNIA

STAFF PSYCHIATRISTS

To do research, diagnosis, and treatment in State Hospitals in several locations. Opportunities for advancement to direct hospital research and professional education activities.

No written examinations. Interviews in San Francisco and Los Angeles twice a month and outside of California this spring.

Good salaries: retirement annuities and other benefits.

Write to

Medical Personnel Services
State Personnel Board
801 Capitol Avenue, Box F
Sacramento 14, California

WANTED—OPHTHALMOLOGIST; UNDER 40; TO join clinic group in Alabama; percentage of gross with guaranteed minimum first year; full partner after first year; opportunity to purchase into clinic after 2 years. Box 7245 C, % AMA.

SAN FRANCISCO AND AREA OPENINGS IN DERmatology, neurosurgery, plastic surgery, internal medicine as well as general practice appointments. Pacific Coast Medical Bureau, Agency, 4144-1408 Central Tower, 703 Market Street, San Francisco 3. C

WANTED PEDIATRICIAN; UNDER 35 TO JOIN clinic group in Alabama; percentage of gross with guaranteed minimum first year; full partner after first year; opportunity to purchase into clinic after 2 years. Box 7209 C, % AMA.

ANESTHESIOLOGIST—BOARD CERTIFIED OR ELIgible; to join group in private practice in large New England Hospital; state training and qualifications in first letter. Box 7205 C, % AMA.

PEDIATRICIAN—URGENTLY NEEDED BY EXPANDing group in Kentucky town of 35,000; early partnership. Box 7100 C, % AMA.

INTERNS AND RESIDENTS WANTED

The ★ signifies a hospital approved for internships and the + approved for residencies in specialties by the Council on Medical Education and Hospitals of the A. M. A. Consult Council's approved list for types of internships and residencies approved.

FIRST YEAR PSYCHIATRIC RESIDENTS—ARKANsas State Hospital, Little Rock; three year program being established on former two year program; now actively associated with new University of Arkansas Medical Center, which includes new medical school buildings and new university hospital; all located on campus of State Hospital; emphasis on supervised, dynamically-oriented; clinical psychiatry during first year; with beginning of good grounding in neurology and psychosomatic medicine; must have fluent use of English and preferably, be eligible for licensure in Arkansas; starting salary up to $647 per month, without maintenance; openings for several well qualified, highly competent individuals; beginning July 1, 1959. Write: Hanan B. Molholm, MD, Director of Research and Education Arkansas State Hospital, Little Rock, Arkansas. D

INTERNSHIPS—175 BED GENERAL HOSPITAL; EXcellent educational programs, seminars, clinics and conferences; all services; teaching staff, wonderful opportunity; salary $100 per month; first three months; $125 per month, second three months and $150 per month thereafter; two weeks vacation; hospital fully approved by Joint Commission on Accreditation; full maintenance. Walther Memorial Hospital, Chicago 51, Illinois. D

PSYCHIATRIC RESIDENCIES — HOSPITAL WITH large medical staff offers fully accredited three year training program beginning July 1, 1959 for men and women desiring certification in psychiatry; includes post-graduate course, guest lectures, training in modern therapeutic procedures and supervised work in mental hygiene clinics; liberal salary includes family maintenance. Box 7260 D, % AMA.

RESIDENTS—GENERAL ONE YEAR ROTATING RESidency starting July 1, 1959 in accredited 174 bed general hospital; attractive mountain, seaside, resort city; United States citizenship; one year internship and eligibility for California license required; salary $560 per month. Apply: Director, County Hospital, Santa Cruz, California. D

SURGICAL RESIDENCIES — 1ST AND 2ND YEAR available in approved 3 year program; adequate number service patients for operative experience; teaching program well organized; fundamentals and objectives available on request; beginning salary $315 and $367.50 respectively. Write: Director, City Memorial Hospital, Winston-Salem, North Carolina. D

PATHOLOGY RESIDENCY — APPROVED FOR 2 years; begin July 1, 1959; California license required; salary 1st year; $250 per month plus maintenance; 2nd year; $300 per month plus maintenance. Apply to: J. D. Kirshbaum, MD, Pathologist, San Bernardino County Hospital, San Bernardino, California. D

(Continued on page 258)

Senokot®

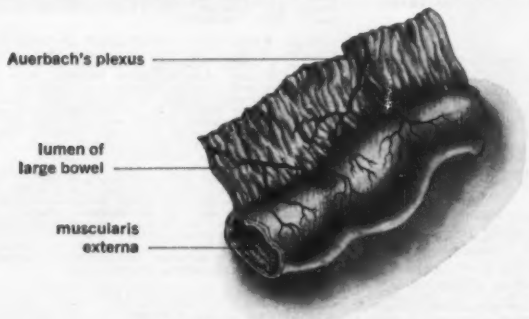
STANDARDIZED CONCENTRATE OF TOTAL ACTIVE PRINCIPLES OF SENNA PODS, PURDUE FREDERICK

TABLETS / GRANULES

UNEXCELLED IN CORRECTION OF CONSTIPATION

"...acts in a way almost indistinguishable from the normal physiologic mechanism..."[1]

'Senokot' tablets and granules reproduce the physiologic process of normal defecation by specifically and selectively stimulating Auerbach's plexus—the large bowel neurogenic regulator. As a result of this pharmacologically unique action, 'Senokot' assures:



Typical Segment of Large Bowel

- gentle, strain-free elimination 8-10 hours after bedtime administration
- no mucosal irritation or griping
- normalized stool consistency
- reduction of dosage and withdrawal of medication
- rehabilitation of the large bowel mechanism

'Senokot' tablets and granules are compatible with all medications and offer maximum convenience and palatability, for all patients in all conditions.

SUPPLY: *Tablets:* Small and easy to swallow, in bottles of 100. *Granules:* Cocoa-flavored, in 8 and 4 ounce canisters.

CITED REFERENCE: 1. Herland, A.L., Lowenstein, A.: Quart. Rev. Surg. Obst. & Gynec. 14:196 (Dec.) 1957.

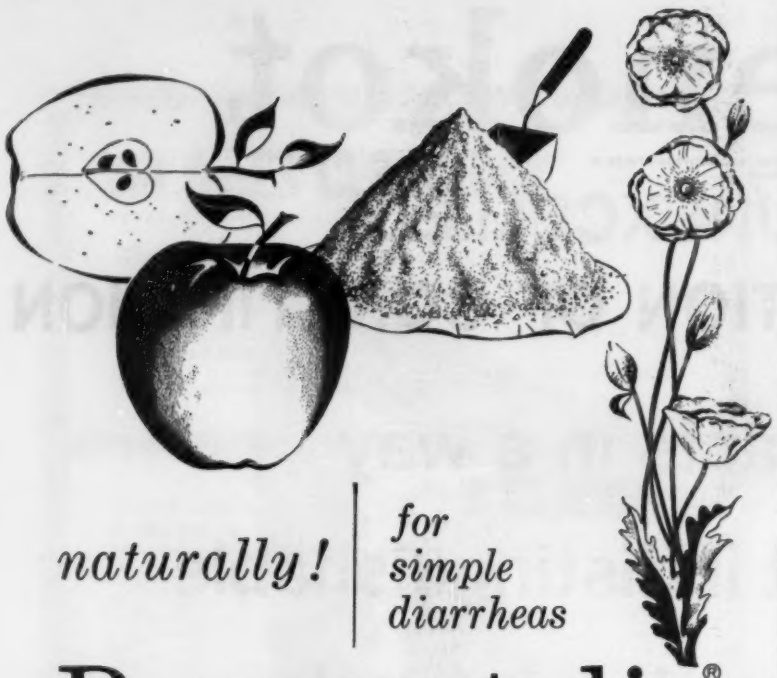
THE EFFECTIVENESS OF THE PRODUCTS IN THE FAMILY OF 'SENOKOT' CONTINUES TO BE DOCUMENTED BY CLINICAL AND LABORATORY INVESTIGATIONS WHICH CONSTITUTE ONE OF THE FASTEST GROWING BIBLIOGRAPHIES ON CONSTIPATION. *(Available upon request to the Medical Director)*

The Purdue Frederick Company

DEDICATED TO PHYSICIAN AND PATIENT SINCE 1892

NEW YORK 14, N.Y. | TORONTO 1, ONTARIO

© Copyright 1959, The Purdue Frederick Company



naturally! | *for simple diarrheas*

Parepectolin®

(Rorer)

containing 3 effective natural antidiarrheal agents:

1. PAREGORIC for control of spasm
2. PECTIN for gel-forming action
3. KAOLIN for detoxicant adsorption

in a delicious, creamy emulsion

Each fluidounce of Parepectolin contains:		
	Paregoric (equivalent)	1.0 dram
	Pectin	2.5 gr.
	Kaolin specially purified	85.0 gr.

DOSAGE: Adults, 1 to 2 tablespoonfuls, t.i.d.
Children, 1 to 2 teaspoonfuls, t.i.d.
OFFERED: Bottles of 4 and 8 fluidounces.

RORER **WILLIAM H. RORER, INC.** PHILADELPHIA 44, PA.

(Continued from page 256)

OBSTETRICAL-GYNECOLOGICAL RESIDENCIES — 3 year Board approval; affiliated local medical school; excellent training and teaching program; plus field trip of choice; $225 beginning salary plus full maintenance. Apply: Superintendent, Maryland General Hospital, 827 Linden Avenue, Baltimore 1, Maryland. D

GENERAL SURGICAL RESIDENCIES—FOUR YEAR Board approval; 387 bed hospital; affiliation local medical school; excellent training program, plus field trip of choice; beginning salary $225 per month and full maintenance. Apply: Superintendent, Maryland General Hospital, 827 Linden Avenue, Baltimore 1, Maryland. D

INTERNSHIPS—JULY 1, 1959; APPROVED ROTATing; excellent salary; apartments available; near Philadelphia; graduates approved medical schools or ECFMG certification only. Apply: Norman W. Skillman, Director, Chester County Hospital, West Chester, Pennsylvania. D

MEDICAL RESIDENCIES—THREE YEAR APPROVAL; full year affiliation at university; also field trip of choice; $225 monthly plus maintenance. Apply: Superintendent, Maryland General Hospital, 827 Linden Avenue, Baltimore 1, Maryland. D

FULLY APPROVED SURGICAL PROGRAM; VACANcy first, second and third years. Contact: W. P. Shelly, M.D., Director of Medical Education, St. Alexis Hospital, Cleveland 27, Ohio. D

ROTATING INTERNSHIPS—387 BED GENERAL HOSpital; excellent training program; affiliation with local medical schools; $200 monthly; plus full maintenance. Apply: Superintendent, Maryland General Hospital, 827 Linden Avenue, Baltimore 1, Maryland. D

WANTED — RESIDENTS IN PSYCHIATRY; THREE year approved residencies available; large Eastern Medical Hospital; excellent teaching program therapeutic procedures; $5,280 to $6,600. Box 7252 D, % AMA.

RESIDENTS IN PATHOLOGY—APPLICATIONS FOR residency in pathology at the Kings County Hospital Center, Brooklyn 3, New York for the term commencing July 1, 1959 are requested. Please write to: Dr. Gordon R. Hennigar for details. D

OBSTETRICAL - GYNECOLOGICAL RESIDENCIES; three year Board approved program; 316 bed general hospital; $225 monthly and full maintenance. Apply: Administrator, St. John's Hospital, Cleveland 2, Ohio. D

FELLOW IN LEGAL MEDICINE—FULLY APPROVED; includes training in forensic pathology, toxicology, investigation of deaths under medical examiner system, administrative legal medicine; two years of approved training in anatomical pathology necessary prerequisite; stipend commensurate with experience; immediate opening; affiliation with Chief Medical Examiner's Office. Apply: Geoffrey T. Mann, MD, Chairman, Department of Legal Medicine, Medical College of Virginia, Richmond, Virginia. D

PSYCHIATRIC RESIDENCIES—AVAILABLE BEGINning July 1, 1959 at the Philadelphia Psychiatric Hospital, Ford Road and Monument Avenue, Philadelphia 31, Pennsylvania; approved for AMA, AHA, ACS, for three years' training in psychiatry, both clinical and didactic, as preparation for Boards; this is 150 bed hospital, includes an out-patient service, treats only acute psychotic and psychoneurotic patients, analytically-oriented; exchange residency with general hospital for neurology and child psychiatry; individual psychotherapeutic supervision beginning in the first year; all cases are controlled. For further details, write for brochure and application. Address communication to: Samuel Cohen, MD, Medical Director. D

GENERAL SURGICAL RESIDENCY AVAILABLE IN the San Francisco-Oakland Bay area; four years fully approved program on a general surgical service in a 712 bed general medical and surgical Veterans Administration Hospital+ with a full consultative staff from the University of California and Stanford Schools of Medicine; affiliated services as required are available in other hospitals of the area; applicants must be U. S. or Canadian citizens who are graduates of approved medical schools; salary range from $3,250 to $4,945 per annum depending on previous training. Apply to: Director, Professional Services, Veterans Administration Hospital, 13th and Harrison Streets, Oakland 12, California. D

APPROVED THREE YEAR RESIDENCIES IN PSYchiatry—New GM&S hospital; well organized teaching program; affiliated with Washington University School of Medicine; all types of psychiatric experience represented, including supervised dynamically oriented psychotherapy, psychosomatic medicine, child guidance, etc.; approved training in psychoanalysis available locally; full time director of training is a member of the American Psychoanalytic Association; attractive career residency program available; citizenship required. Write to Dr. Bernard A. Cruvant, Veterans Administration Hospital, 915 North Grand Avenue, St. Louis 6, Missouri. D

PHYSICAL MEDICINE RESIDENCY—AVAILABLE IN the San Francisco-Oakland Bay area; 3 year residency leading to American Board certification in a 712 bed general medical and surgical Veterans Administration hospital; excellent opportunities for clinical investigations under the supervision of a certified Board specialist; applicants must be U. S. or Canadian citizens who are graduates of approved class A medical schools; Salary range: $3250 to $4945 for regular residents and $6500 to $9800 per annum for career residents depending on previous training. Apply to: Director of Professional Services, Veterans Administration Hospital, 13th and Harrison, Oakland 12, California. D

RESIDENCIES AVAILABLE; MODERNLY EQUIPPED 516 bed GM&S fully approved Veterans Administration Hospital+; affiliated with Northwestern University Medical School; openings for residents in internal medicine, general surgery, pathology, physical medicine and rehabilitation, diagnostic and therapeutic radiology, neuropsychiatry, available January 1, 1959, and July 1, 1959; must be citizens and graduates of approved schools; stipend $3,250 to $5,545. For information write: Director, Professional Services, Veterans Administration Research Hospital, 333 E. Huron Street, Chicago 11, Illinois. D

ROTATING INTERNSHIPS AVAILABLE JULY 1, 1959—St. Joseph's Hospitals+ and Dispensary, Pittsburgh, Pennsylvania; 200 bed general hospital; competent staff men in all specialties; one year of approved internship training and educational program; opportunities for rewarding staff positions; full maintenance and monthly stipend of $400; new modern apartment building to accommodate married and single interns; only applicants of approved medical schools will be considered. Send applications to: Dr. J. E. Weber, Chairman, Intern Committee, St. Joseph's Hospital, 2117 Carson Street, Pittsburgh 3, Pennsylvania. D

CAREER RESIDENCY—IN PATHOLOGY AVAILABLE immediately in large general medical and surgical hospital; very active autopsy and surgical pathology services, as well as comprehensive and didactic program in clinical pathology; 5 full time and 5 consulting attending pathologists; 4 year Board approval; salary $6,505 to $9,890 per annum depending on professional experience; applicants must be graduates of approved medical school and U. S. citizen. For further information, write: Chief, Laboratory Service, Veterans Administration Hospital, Hines, Illinois. D

PATHOLOGY RESIDENCIES—AVAILABLE JUNE 1, 1959; 4 year approval pathologic anatomy, clinical pathology; 400 bed hospital expanding to 800 beds by late spring; approved medical technology training school; 200 necropsies; 8,000 surgicals, 150,000 clinico-pathologic examinations; medical photography; educational program; staff of two Board certified pathologist and one assistant pathologist; bacteriologist; 4-6 residents; stipend $2,400 plus full maintenance including family. Apply: Leo Lowbeer, MD, FCAP, Hillcrest Medical Center, Tulsa, Oklahoma. D

MEDICAL RESIDENCY AVAILABLE IN THE SAN Francisco-Oakland Bay area; three years approved program on a service consisting of 247 beds in a 712 bed general Veterans Administration Hospital with full consultative staff from the University of California and Stanford University Schools of Medicine and affiliated services in other hospitals of the area; applicants must be U. S. or Canadian citizens who are graduates of Class A medical schools. Apply to: Director, Professional Services, Veterans Administration Hospital, 13th and Harrison Streets, Oakland 12, California. D

HOUSE PHYSICIANS AND INTERNS—WANTED FOR 312 bed fully accredited JCAH general hospital; approved for four internships; 12,000 admissions per year, excellent clinical material and teaching program; interns $350, house physicians, Pennsylvania license $750; openings for interns January 1 and July 1, 1959; full maintenance; family housing available; suburb of Pittsburgh. Apply: Assistant Administrator, Westmoreland Hospital, Greensburg, Pennsylvania. D

1ST, 3RD, 4TH YEAR RESIDENCIES IN PATHOLOGY available; 419 beds; large teaching program; necropsy rate 75%; not an easy residency, but good training for one who wants to work. Address: Paul Weld, MD, Director of Medical Education, Rochester General Hospital*+, Rochester 21, New York. D

RESIDENCIES IN SURGERY—APPROVED 250 BED general hospital in San Francisco; three year approval; large out-patient department and clinic service; stipend $325 per month first year plus maintenance. Contact: Director of Medical Education, St. Luke's Hospital*+, 1580 Valencia Street, San Francisco, California. D

(Continued on page 263)

Butazolidin®

(phenylbutazone Geigy)

. . . in a wide range of inflammatory indications

arthritic • phlebitic • rheumatic

200 years Geigy

Geigy

Ardsley, N. Y.

Broad-Spectrum Efficacy: **Over 1,000 published papers* attest to the efficacy of Butazolidin in a wide variety of arthritic and rheumatic indications. In a recent study,[1] Butazolidin proved to be especially effective in the management of rheumatoid spondylitis and gouty arthritis. Favorable results were also observed in rheumatoid arthritis, osteoarthritis, the painful shoulder syndrome and miscellaneous other musculoskeletal conditions of an inflammatory nature.**

Confirmatory evidence from other areas of therapy include dramatic resolution of superficial thrombophlebitis.[2]

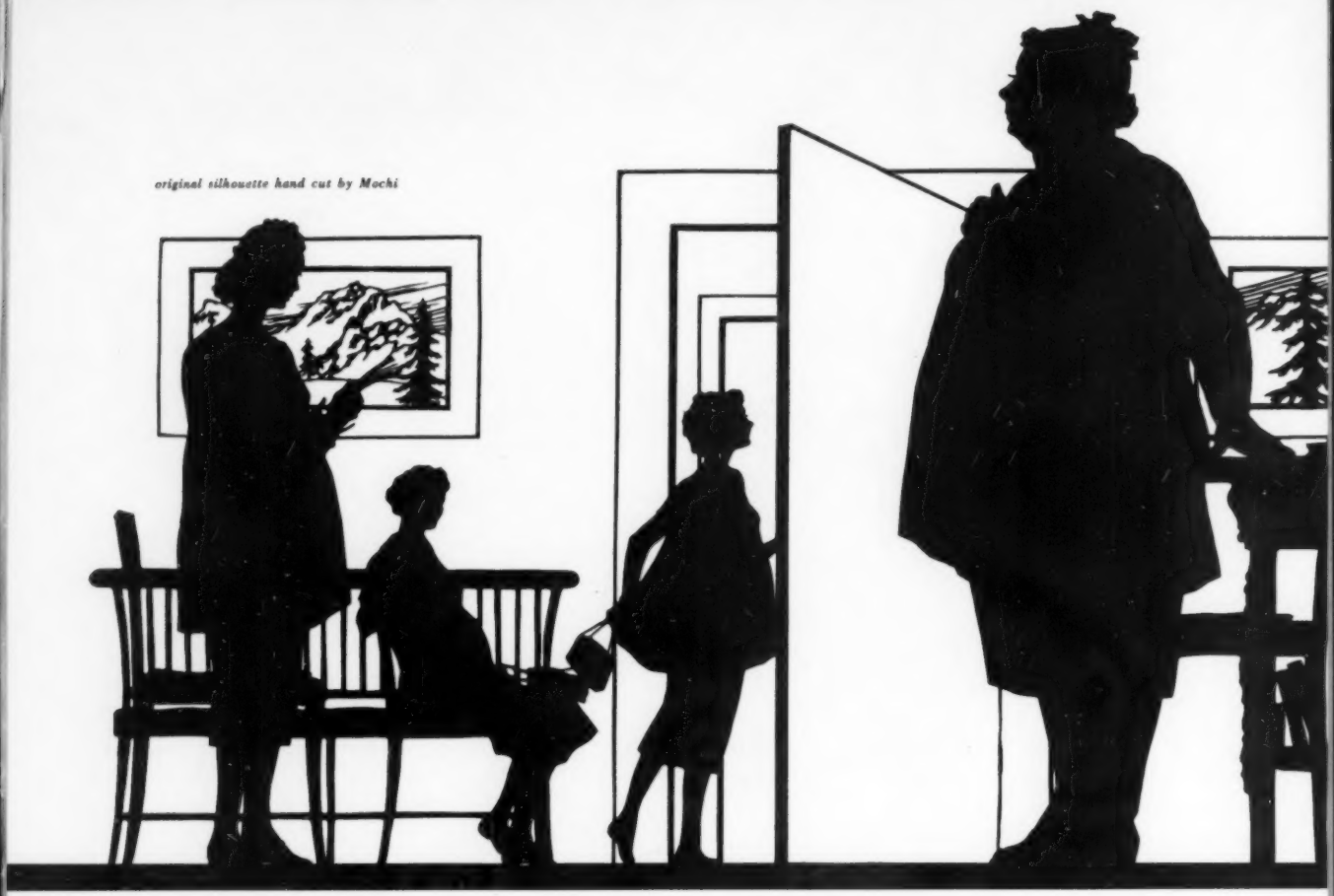
Broad-Spectrum Clinical Benefits: **Therapy with Butazolidin usually provides comprehensive symptomatic improvement. Relief of pain is effective and prompt in 75% of the patients. Early improvement of function and range of mobility are commonly reported. In acute cases there is a significant and early resolution of inflammation, effusion and spasm.**

1. Babino, M. M.; Lachio, L. M.; Narcroso, B.; Latona, S., and Riordan, D. J.: Am. Pract. & Digest Treat. 8:1788, 1957.
2. Stein, I. D.: Circulation 12:833, 1955.

* Complete bibliography furnished on request.

97730

BUTAZOLIDIN® (phenylbutazone Geigy): Red coated tablets of 100 mg. BUTAZOLIDIN® Alka: Capsules containing BUTAZOLIDIN (phenylbutazone Geigy) 100 mg.; aluminum hydroxide 100 mg.; magnesium trisilicate 150 mg.; homatropine methylbromide 1.25 mg.



original silhouette hand cut by Mochi

to meet the threat of excess weight gain in your obstetrical patients

PRELUDIN®

(brand of phenmetrazine hydrochloride)

specifically for weight reduction

In a controlled study of obesity in pregnancy,[1] PRELUDIN "...proved to be a reliable and effective anorexigenic agent, harmless to the patient and her pregnancy." Fifty patients treated with PRELUDIN during the third trimester were held to an average weekly gain of 0.18 pounds as compared to 0.94 pounds in the untreated group. Blood pressures remained within normal limits; no evidence of toxicity, habituation or allergy was noted.[1] The effectiveness of PRELUDIN for weight control in obstetrics has been confirmed by others.[2,3,4] With PRELUDIN, there is no interference with labor or aggravation of the common tensions of pregnancy.[2,3,4]

(1) Birnberg, C. H., and Abitbol, M. M.: Obst. & Gynec. **11**:463, 1958. (2) Bocci, A., and Davitti, L.: Minerva ginec., Torino **9**:15, 1957. (3) Roncuzzi, R.: Riv. ostet. e ginec. **11**:734, 1956. (4) Whitelaw, J. M.: Phenmetrazine (Preludin) A Double-blind Study in Weight Control During Pregnancy, to be published.

PRELUDIN® (brand of phenmetrazine hydrochloride). Scored, square, pink tablets of 25 mg. Under license from C. H. Boehringer Sohn, Ingelheim.

GEIGY

ARDSLEY, N. Y.

running noses

and open stuffed noses orally

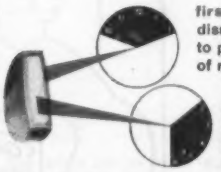
with TRIAMINIC, an oral nasal decongestant

- in nasal and paranasal congestion
- in sinusitis
- in postnasal drip
- in allergic reactions of the upper respiratory tract

the advantages of effective oral medication

- reaches *all* respiratory membranes systemically
- avoids "nose drop addiction"
- not likely to cause rebound congestion
- provides long-lasting relief

Relief with Triaminic is prompt and prolonged because of this special timed-release action . . . beneficial effect starts in minutes, lasts for hours.


first—the outer layer dissolves within minutes to produce 3 to 4 hours of relief
then—the inner core disintegrates to give 3 to 4 more hours of relief

Each* TRIAMINIC *Tablet provides:

Phenylpropanolamine HCl . . .	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

One-half of this formula is in the outer layer, the other half is in the core.

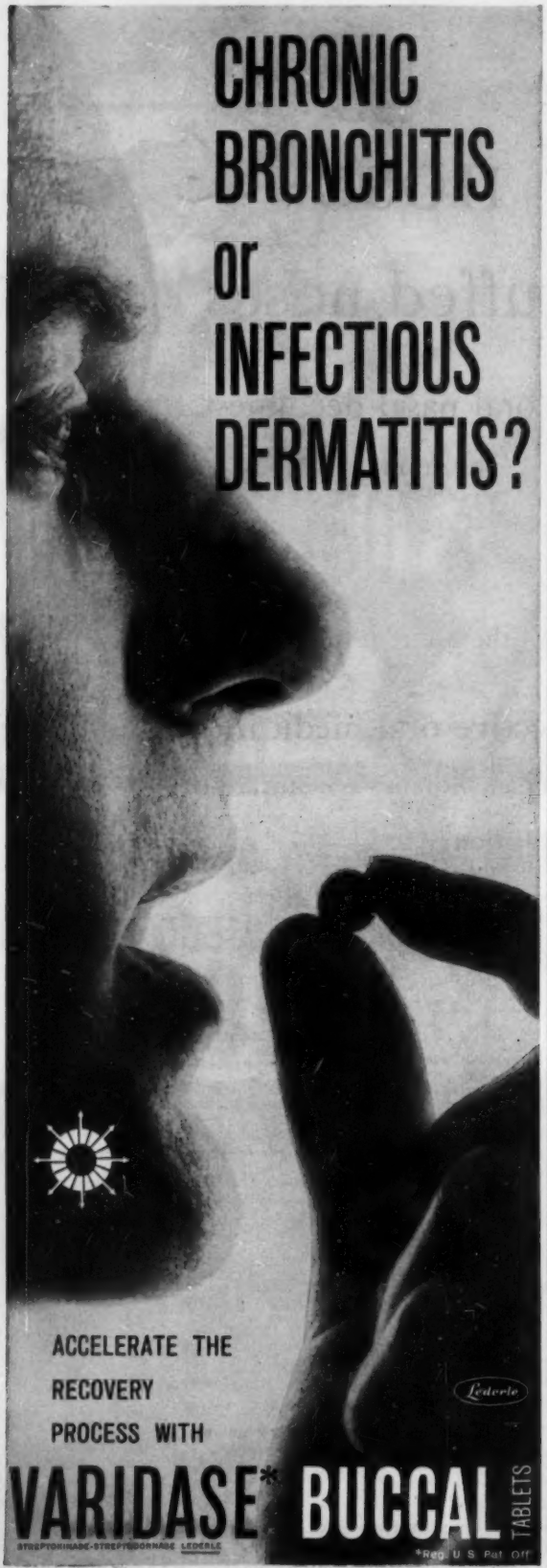
Dosage: One tablet in the morning, mid-afternoon and in the evening, if needed.

Triaminic®

Also available: For the occasional patient who requires only half dosage: timed-release TRIAMINIC JUVELETS. Each Juvelet is equivalent to ½ of a Triaminic Tablet.

For those patients who prefer liquid medication: TRIAMINIC SYRUP. Each 5 ml. tsp. of this palatable syrup is equivalent to ¼ of a Triaminic Tablet.

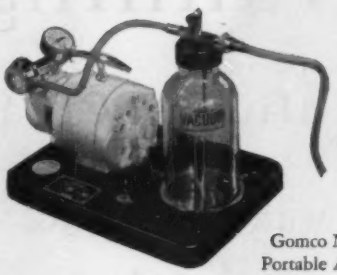
SMITH-DORSEY • a division of The Wander Company • Lincoln, Nebraska • Peterborough, Canada



LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

FOR PRODUCTS YOU MUST DEPEND ON —

QUALITY
IS YOUR BEST
ECONOMY



IT'S YOURS
IN
GOMCO®
PUMPS

Gomco No. 789
Portable Aspirator

We at Gomco *know* there's no short cut to quality. The Gomco pump, built with watchmaker's precision — the Gomco Safety Overflow Valve that prevents overflow damage to the pump — the Gomco overlapping rubber bottle cap that can't work loose — the attractive finish and sturdy gleaming plastic base — are all extra features we include for this reason. We *know* users want aspirators that *won't* be spending time in repair shops — that will last indefinitely — that will be convenient and efficient and quiet in use.

Don't be misled by price or looks. For aspirators you'll be glad you bought years from now, ask for GOMCO.

GOMCO SURGICAL MANUFACTURING CORP.

820-M East Ferry Street Buffalo 11, New York

Suction, Suction-Ether and Suction-Pressure Pumps • Thermotic Drainage Pumps • Aerosol Penicillin Pumps • Thoracic Pumps
Dental Aspirators • Tidal Irrigators

"Patient's feeling better today, eh?"

(Continued from page 258)

PATHOLOGY RESIDENCY—1-4 YEARS FOR 6 RESIDENTS; fully approved for PA and CP; four Certified pathologists; 1957 surgicals, 8,879; autopsies, 330; total examinations 670,885; Indiana University teaching conferences and appointments available; stipend first year $3,336 with opportunity for extra income and annual increases; housing on premises available; Indiana licensure is necessary. Apply to: Dr. Lester H. Hoyt, Director of Laboratories, Methodist Hospital, Indianapolis 7, Indiana. D

NEUROLOGY RESIDENCIES AND FELLOWSHIPS—3 year Board approval•+; Jackson Memorial Hospital, the primary teaching affiliate of the University of Miami School of Medicine, 900 bed general hospital with active neurological teaching service; basic science training; active neuroradiology and neuro-ophthalmology; EEG and neuropathology training; stipend first year $2,500, second year $3,000, third year $3,500 with maintenance. Write: Dr. Peritz Scheinberg, Jackson Memorial Hospital, Miami, Florida. D

AVAILABLE JULY 1, 1959; APPROVED ROTATING internships; 218 bed general hospital increasing to 310 by fall of 1959; with approved residencies in medicine, surgery and obstetrics-gynecology; modern, well equipped; house staff training program; allowed full range under proper medical supervision; full maintenance and uniforms; monthly stipend $200. Lawrence and Memorial Hospitals, New London, Connecticut. Hilliard Spitz, MD, Chairman, Committee on Residents and Interns. D

PSYCHIATRIC RESIDENCY VACANCIES — APproved three year residency in conjunction with Northwestern University Medical School; extensive training programs in clinical psychology, vocational counseling, social service, and related fields; salary range residents $3,250 to $4,165; career residents $6,505 to $9,890; hourly commuting distance from Chicago; citizenship required. Write: Manager, Veterans Administration Hospital, Downey, North Chicago, Illinois. D

RESIDENCY — INTERNAL MEDICINE; 1,300 BED general hospital•+; 3 year; teaching unit; Baylor University College Medicine; female; private, outpatient medicine; includes all sub-specialties under supervision of Board Certified specialists; stipend $3,250 to $4,165; radioisotopes, pulmonary function, research; etc.; must be United States citizens or graduates or U. S. or Canadian Medical Schools. H. D. Bennett, MD, Veterans Administration Hospital, Houston, Texas. D

PATHOLOGY RESIDENCIES—OPENINGS NOW AND July 1, 1959; active; integrated training program in pathologic anatomy and clinical pathology; approved for 4 years; 720 bed general hospital•+; salary $300 to $450 per month including full maintenance; applicant must be U. S. citizen; have or be eligible for California license; descriptive brochure available on request. Write: Personnel Director, Sacramento County Hospital, Sacramento 17, California. D

RESIDENCY IN PSYCHIATRY; THIRD YEAR RESIdency available in newly opened psychiatric unit in private general hospital•+; inpatient, outpatient and child psychiatry facilities available; excellent opportunity to become acquainted with psychiatrists in San Francisco; salary $450 per month. Write: Mr. E. C. DeLear, Assistant Administrator, Saint Francis Memorial Hospital, 900 Hyde Street, San Francisco 9, California. D

A VACANCY IN THE FIRST YEAR OF A TWO YEAR residency program in internal medicine; approved by AMA for two years; 442 adult bed general hospital•+; four charity clinics; including a medical and a cardiac; stipend $225 per month for first year, and $235 per month for second year; applicants must be graduates of approved medical schools. Write to: Administrator, Saint Luke's Hospital, 601 East 19th Avenue, Denver 2, Colorado. D

RESIDENT PHYSICIANS WANTED—FOR OPENINGS in Los Angeles County General Hospital; positions to be filled now and in next few months in neuromedicine, physical medicine, pediatrics, anesthesiology, and radiology; training programs meet requirements of each specialty board. Write: Dr. William Evans, Associate Medical Director, Los Angeles County Hospital, 1200 N. State Street, Los Angeles 33, California. D

GENERAL SURGERY RESIDENCY — FULLY APproved four year program affiliated with Louisiana State University and Tulane University Medical Schools; salary begins at $3,250 grading up to $4,945; applications are now being received for July 1, 1959; must be citizen of United States. Write: Chief of Surgical Service, Veterans Administration Hospital, 1601 Perdido Street, New Orleans, Louisiana. D

RADIOLOGY RESIDENCIES—SECOND AND THIRD year available July 1, 1959; short term general hospital of 442; liberal stipend; department staff of 26 persons plus 6 full time Board Certified radiologists; approved program for three years of specialty training. Write furnishing summary of education to: Director of Radiology, Delaware Hospital•+, 14th and Washington Streets, Wilmington 99, Delaware. D

PATHOLOGY—PATHOLOGIC ANATOMY; 200 BED general hospital•+; large eastern metropolitan area; approved; active university affiliated program including teaching; available July, 1959-1960; active aut. service; 3,000 surgicals cytology; ideal for surgeon seeking active year of pathology or for beginning pathology resident; good salary; close personal supervision. Apply: 6928 D, % AMA.

TWO YEAR APPROVED PEDIATRIC RESIDENCY—Northern California; organized teaching program with eight full time Board pediatricians; appointments available immediately and throughout year; California licensure eligibility required; salary $315 to $390. Contact: Alexander King, MD, Chief, Pediatrics Department, Kaiser Foundation Hospital+, Oakland 11, California. D

APPROVED RESIDENCIES IN MEDICINE, PSYCHIatry, pathology—Available January 1, 1959; 684 bed county hospital•+ near New York City; exceptional educational opportunity; only applicants who have completed one year approved internships will be considered; stipend $200 monthly plus complete maintenance. Apply: Superintendent, Bergen Pines County Hospital, Paramus, New Jersey. D

RESIDENCIES—INTERNAL MEDICINE; ACTIVE 300 bed general hospital; approved 3 year residency program; full time Board specialists teaching; salaries range from $315 to $415, depending upon year of training and family status; eligible California licensure. Write: Director of Education, Kaiser Foundation Hospital+, 280 W. MacArthur Blvd., Oakland 11, California. D

where infant milk

allergy

exists

Gerber Meat Base Formula offers a reliable replacement for cow's or goat's milk since it closely approximates evaporated milk in complete proteins, carbohydrates, fats, minerals – is well-tolerated by even the newborn. Clinical survey* indicated no weight loss or anemia in over 100 infants receiving meat base formula. To be fed through regular nursing bottles. Available through druggists on specification.

Gerber Products Company, Fremont, Michigan.

Gerber® MEAT BASE Formula

*Rowe, Albert, Jr. and Rowe, Albert H.: Cal. Med. 81:379 (Oct.) 1954

APPROVED RESIDENCIES IN MEDICINE, PSYCHIatry, pulmonary diseases; available July 1, 1959; 684 bed county Hospital near New York City; exceptional educational opportunity; only applicants who have completed one year approved internships will be considered; stipend $200 monthly plus complete maintenance. Apply: Superintendent, Bergen Pines County Hospital, Paramus, New Jersey. D

RESIDENCIES•+ — MODERN 236 BED HOSPITAL, charity service and clinics; general practice 1 to 2 years; pathology 3 years; internal medicine; approved rotating internships; full time director medical education; stipend $250 first year, $75 housing allowance. Write: Intern-Resident Committee, Cabell Huntington Hospital, Huntington, West Virginia. D

APPROVED ROTATING INTERNSHIPS—ONE YEAR internship; available July 1, 1959; 684 bed county hospital near New York City; exceptional educational opportunity; only applicants of approved medical schools will be considered; stipend $100 monthly plus complete maintenance. Apply: Superintendent, Bergen Pines County Hospital, Paramus, New Jersey. D

INTERNSHIPS — ROTATING; AVAILABLE JULY 1, 1959; 216 bed modern general hospital•; AMA approved; stipend $250 per month plus full maintenance; additional $50 per month living out allowance for married interns; broad experience available in all services. Apply: Chairman, Intern Committee, McKinley Hospital, Trenton, New Jersey. D

APPROVED RESIDENCIES OFFERED IN MEDICINE, pediatrics, urology, ophthalmology, otolaryngology and psychiatry; starting July 1st, 1959; 500 bed municipal hospital having 14,000 admissions; 120,000 clinic and 36,000 emergency visits yearly; adequate salaries. Apply: Administrator, Kansas City General Hospital, Kansas City, Missouri. D

APPROVED THREE YEAR RADIOLOGY RESIDENCY —500 bed general hospital and large out-patient service in medical center; affiliations: University of Illinois, supplement therapy; Children's Memorial, pediatric radiology; supervised by Dean's of Illinois, Stritch and Chicago Medical Colleges. Apply: Manager, Veterans Administration Hospital, 820 South Damen, Chicago, Illinois. D

ANESTHESIOLOGY RESIDENCY — APPROVED FOR two years; opening for first and second year now available; 350 bed active surgical hospital; salary $150 and up depending on amount of previous residency training. Apply: Director, Mount Zion Hospital and Medical Center•+, 1600 Divisadero Street, San Francisco, California. D

RESIDENCIES — INTERNAL MEDICINE; 1ST AND 2nd year at $150 and $185 per month respectively, plus maintenance; transportation allowance from the west coast; available to graduates of approved medical schools only. Address: Medical Director, Queen's Hospital•+, Box 861, Honolulu, Hawaii. D

(Continued on next page)

The NEW DUAL PURPOSE

3" x 9" STRIP

Shorter length ends waste on small wounds. New Z-fold permits smooth application in plastic and other surgery. Guaranteed sterile at time of use.

6th SIZE of VASELINE® PETROLATUM GAUZE

3" x 3" PAD

Three-ply, fine-mesh gauze, lightly impregnated — for use in physician's office, industrial medical department, first aid.

Now supplied in: 1/2"x 72" 3"x 18" 1"x 36" 3"x 36" 3"x 3"/ 3"x 9" 6"x 36"

Sole Maker:

CHESEBROUGH-POND'S INC.

Professional Products Division

New York 17, N. Y.

VASELINE *is a registered trademark of Chesebrough-Pond's Inc.*

(Continued from preceding page)

APPROVED ROTATING INTERNSHIPS—ONE YEAR internship January 1, 1959; 684 bed county hospital*+ near New York City; exceptional exceptional opportunity; only applicants of approved medical schools will be considered; stipend $100 monthly plus complete maintenance. Apply: Bergen Pines County Hospital, Paramus, New Jersey. D

RESIDENCIES IN OBSTETRICS-GYNECOLOGY—Approved 250 bed general hospital in San Francisco; two year approval; large out-patient department and clinic service; stipend $325 per month first year plus maintenance. Contact: Director of Medical Education, St. Luke's Hospital, 1580 Valencia Street, San Francisco, California. D

SURGICAL RESIDENT—LARGE COUNTY HOSPITAL; near New York City; available July 1, 1959; excellent educational service; stipend $200 monthly plus complete maintenance; applicants must be graduates of approved medical schools plus one year approved internship. Apply: Superintendent, Bergen Pines County Hospital, Paramus, New Jersey. D

PEDIATRIC RESIDENCY — SAN FRANCISCO; TWO year approval; full time staff Board Certified pediatricians in teaching program; active service with rooming-in experience; appointments available immediately; California license required. Contact: Chief, Pediatrics Department, Kaiser Foundation Hospital*+, San Francisco 15, California. D

CHIEF RESIDENT PHYSICIAN IN INTERNAL MEDICINE—Approved service; available July 1, 1959; to supervise house staff of 35 physicians; 684 bed county hospital; unusual opportunity for clinical experience; salary $300 monthly plus complete maintenance and uniforms. Apply: Superintendent, Bergen Pines County Hospital, Paramus, New Jersey. D

APPROVED ROTATING INTERNSHIPS—4; 312 BED fully accredited hospital; 12,000 admissions per year; good clinical material; excellent programs; openings for January 1 and July 1, 1959; $350 per month plus full maintenance; family housing available; suburb of Pittsburgh. Apply: Assistant Administrator, Westmoreland Hospital, Greensburg, Pennsylvania. D

FOUR GENERAL PRACTICE RESIDENCIES—AVAILable July 1, 1959; AMA approved near medical center; only graduates of approved medical schools or ECFMG Certified will be considered; starting salary $350; complete maintenance; apartments available for married residency. Administrator, MacNeal Memorial Hospital*+, Berwyn, Illinois. D

RESIDENT FOR PATHOLOGIC ANATOMY; JULY 1, 1958; fully approved 4 year residency; 550 bed general hospital in southeast Pennsylvania; attractive living facilities; city has many cultural advantages; hospital in a beautiful 40 acre park. Box 7182 D, % AMA.

GENERAL PRACTICE RESIDENCY AVAILABLE; 115 bed hospital fully accredited by the Joint Commission on Accreditation of Hospitals; salary $400 month. St. Francis Hospital, Wilmington, Delaware. D

PATHOLOGY RESIDENCIES — JULY 1, 1959; 365 beds; two year PA approved; two certified pathologists; 1st year $3,600 and maintenance; second, third or fourth year man $4,200 and maintenance; surgicals, 6,900; autopsies, 215; total exams, 129,000. Apply to: Dr. David G. Mason, Providence Hospital, Seattle 22, Washington. D

ANESTHESIOLOGY RESIDENCIES — APPLICATIONS for first year appointments for July, 1959 now being accepted; graduates of U. S. medical schools only need apply. For information, write: Dr. J. Gerard Converse, Department of Anesthesiology, University of Miami School of Medicine at Jackson Memorial Hospital*+, Miami 36, Florida. D

INQUIRIES ARE INVITED CONCERNING SURGICAL residencies; 400 bed private hospital; AMA and Board approved for four years of surgical training; salary $2,340 per year plus full maintenance for first year residents. Apply: Registrar, Medical Education, The Jewish Hospital and Medical Center, Cincinnati 29, Ohio. D

RESIDENCY—ONE OPENING FOR A ONE YEAR UNapproved residency in medicine and one in surgery beginning July 1, 1959; bed capacity 215; monthly stipend $250 with full maintenance. Please contact: Dr. H. D. Chieffo, Chairman, Interne Committee, St. Francis Hospital Jersey City 2, New Jersey. D

FELLOWSHIP IN PATHOLOGY—BEGINNING JULY 1, 1959; four year approved training in pathology; salary $200 per month, plus maintenance. Contact: Lester F. Belter, MD, Department of Pathology, Medical College of Virginia, Richmond, Virginia. D

WANTED—RESIDENT PHYSICIAN FOR 40 BED HOSpital and clinic; starting salary $6,000 with complete maintenance; Texas license required; excellent opportunity for advancement; location: West Texas. Box 7078 D, % AMA.

INTERNSHIP—ROTATING; NEW 200 BED VOLUNtary hospital; accredited; maintenance $2,400 year; qualified foreign granduates accepted. Administrator, Booth Memorial Hospital, Flushing 55, New York, New York. D

PATHOLOGY—FOUR YEAR FULLY APPROVED RESidency available July 1, 1959. Apply to: Executive Director, Jewish Hospital of Brooklyn, 555 Prospect Place, Brooklyn, New York. D

GENERAL RESIDENT PHYSICIAN FOR 100 BED short term general hospital; immediate opening; good salary; physician with knowledge of English. Apply: Administrator, Beebe Hospital, Lewes, Delaware. D

LOCUM TENENS WANTED

LOCUM TENENS WANTED—BUSY GENERAL PRACtice; Los Angeles suburb; completely equipped, air-conditioned office; 3 to 10 months; $1,000 month. Box 7255 G, c/o AMA.

SITUATIONS WANTED

UNIQUE POSITION IN INDUSTRY REQUIRING proven business leadership, organization and research ability; imagination, background emphasizing chemistry, pharmacology, biophysics and isotope training, writing and teaching interests; Board Certified radiologist 1953, Oak Ridge experience, married; under 35; presently head of hospital x-ray department; desires return to more fundamental problems, prefer East or Midwest. Box 7266 I, c/o AMA.

SURGEON; B.S., MEDICINE; DIPLOMATE, GENERal Surgery; excellent training and experience, including tumor work; 4 years, medical officer, US Army; 8 years, Associate in General and Industrial practice; seeks surgical practice (General, Abdominal, Trauma), perhaps combined with general and/or industrial; exceedingly fine gentleman with outstanding references; desires Illinois, prefers Chicago area; early 40's. WOODWARD MEDICAL BUREAU, 185 No. Wabash, Chicago 1. I

ORTHOPAEDIC SURGEON — 30; MARRIED; COMpleted Part I American Board orthopaedic surgery examination; available now; seek association with individual or group in New York, New Jersey or Connecticut area. Box 7151 I, % AMA.

CERTIFIED OPHTHALMOLOGIST AVAILABLE FOR association with ophthalmologist, otolaryngologist; DNB; experienced private practice; family; 34; seeking relocation northeast or west coast; solo opportunity considered. Box 7173 I, % AMA.

BOARD CERTIFIED GASTROENTEROLOGY AND INternal medicine; married; priority IV; Mayo trained; research; fluoroscopy; endoscopy; liver biopsy; university faculty; desires full time association, partnership, group or university United States. Box 6795 I, % AMA.

PHYSICIAN — SURGICAL TRAINING; QUALIFIED urologist; will do some general practice; national Boards and several state Boards; desire location or association; 34 years; married; family; quote probable income. Box 7263 I, c/o AMA.

GENERAL SURGEON—FIVE YEARS TRAINING INcluding one year thoracic work; finished training in July; desire group, partnership, or solo practice; available after February 1st. Box 7261 I, c/o AMA.

GENERAL PRACTITIONER—AGE 40; AAGP; EXperience in surgery; wants position in hospital or small group in California. Box 7259 I, c/o AMA.

GENERAL SURGEON—31 YEARS OLD FINISHING four year university residency including cardiovascular and chest experience; desire location July, 1959, will consider teaching, association or group. Box 7210 I, % AMA.

ORTHOPAEDIC SURGEON—42; DIPLOMATE; MARried; family; military service obligation completed; desires to relocate south or southwest; associate, group or private practice. Box 7212 I, % AMA.

SURGEON — BOARD CERTIFIED; DESIRES ASSOciation with individual or group; available immediately. Box 7205 I, % AMA.

BOARD RADIOLOGIST WITH FIVE YEARS EXPERIence desires to make change; any reply will be fully investigated. Box 7237 I, % AMA.

OROLOGIST—BOARD ELIGIRLE; DESIRES LOCAtion or association in the state of Maryland; excellent recommendations. Box 7197 I, % AMA.

(Continued on page 266)

prevents painful engorgement *New 2-day*

TACE 25mg.

(chlorotrianisene)

over 3,000 patient studies[1,3,4] have proved TACE 12 mg. unsurpassed[2] in prevention of painful breast engorgement. Now, these same advantages are available in a shorter term 2-day course of therapy with TACE 25 mg. capsules.[2]

recurrent engorgement and withdrawal bleeding rare[1,3,4] (just 3 cases of refilling and 9 of withdrawal bleeding among 3,251 patients), because TACE is longer acting. TACE 25 mg. retains these advantages of unique storage in body fat. All TACE forms are released gradually, like a natural hormonal secretion, even after therapy stops.

ALSO NEW TACE with Ergonovine—convenient, combination therapy for relief of painful breast engorgement *and* prevention of postpartum hemorrhage due to uterine atony.[2] (Composition: Each capsule contains TACE 25 mg. and Ergonovine Maleate 0.1 mg.)

dose for both forms: 2 capsules every six hours for six doses, beginning immediately after delivery.

Merrell

THE WM. S. MERRELL COMPANY
New York · CINCINNATI · St. Thomas, Ontario
Another Exclusive Product of Original Merrell Research

1. Nulsen, R. O. et al.: Am. J. Obst. & Gynec. 65:1048, 1953. 2. Nulsen, R. O.: Concurrent administration of TACE and Ergonovine, Ohio State M. J. *(in press)*. 3. Bennet, E. T. and McCann, E. C.: J. Maine Med. Assoc. 45:225, 1954. 4. Eichner, E. et al.: Obst. & Gynec. 6:511, 1955.

TRADEMARKS: 'TACE WITH ERGONOVINE,' TACE

(Continued from page 264)

Patricia Edgerly

Do you need a well-qualified assistant or associate? We have many who would interest you. Write us.

THE NEW YORK MEDICAL EXCHANGE
489 Fifth Avenue (Opposite Public Library)
Specialists in Selection Since 1926

AVAILABLE—AMERICAN BOARD SPECIALISTS TO head departments, join groups, etc.; physicians for private practice, assistants or associates, industry, public health. Please write for recommendations. Shay Medical Agency, 55 E. Washington, Chicago. I

WELL TRAINED THORACIC SURGEON AVAILABLE January 1st; three years' training; general surgery; two years' training, thoracic surgery, teaching hospitals. Medical Bureau, Burneves Larson, Director, 900 North Michigan Avenue, Chicago. I

PROFESSIONAL & TECHNICAL AIDES

WANTED—TECHNOLOGISTS: (a) CHIEF MED TECH: supv abt 15 in busy lab, 250-bd gen hsp; coll affil med tech sch; min $5400; city 50,000; MidE. (b) MED TECH; 45-hd gen hsp; $5400; call if desired; Cal summer resort loca. (c) XRAY TECH; apprv'd vol gen hsp 200 bds; resid city 20,000; NE. (d) BACTERIOLOGIST; M.S., Ph.D. to head active dept, 300-bd gen hsp; to $8000; univ. resort city 20,000; W. (e) MED TECHS: ASCP; fully apprv'd vol gen hsp 400 bds; resid. indus city nr NYC; to $4800. (f) LAB & XRAY TECH; exp qual x-ray; 40-bd gen hsp apprv'd JCAH; $4800; resort twn 10,000; SW. (g) MED TECH; full chge dept, 100-bd apprv'd gen hsp; N. Engl coll, summer resort twn 20,000. (h) CHIEF MED TECH; very busy lab; 270-bd gen hsp, expand's shortly; abt $6000; SW cntl city 150,000. (i) MED TECH; apprv'd gen hsp 50 bds; mtn resort twn, N. Engl. (j) CHEMIST; M.S. to hd dept in new lab doing all latest proc; 150-bd vol gen hsp; ideal loca, city 30,000; Pac NW. Woodward Medical Bureau, 185 N. Wabash, Chicago, Ann Woodward, Director. L

MEDICAL TECHNOLOGIST STARTING SALARY $400 month; fringe benefits; 1 hour from seashore, desert, mountains, Hollywood; 200 beds. Write: Pathologist, Pomona Valley Community Hospital, Pomona, California. L

NYLON NET Full Fashioned Two-Way Stretch ELASTIC STOCKINGS

OPEN TOE—CLOSED HEEL—SEAM BACK—FOR MEN AND WOMEN

EXCELLENT COSMETIC AND THERAPEUTIC VALUE

THIS THERAPEUTICALLY EFFECTIVE ELASTIC STOCKING WITH GRADIENT SUPPORT IS THE ESSENTIAL BEGINNING OF CORRECTING FLUID DYNAMICS AND CAN PROMOTE VENOUS AND LYMPATHIC RETURN OF FLUIDS FROM THE EXTREMITIES.

CUSTOM MADE FROM MEASUREMENTS . . . 24 HOUR SERVICE WHEN REQUESTED

PRICES for 1300 Line	
Arm Support	$ 8.00 ea.
Additional supports, same size	7.00 "
Underknee hose, from A to E	8.00 "
Additional supports, same size	7.00 "
Full thigh hose, from A to I	12.00 "
Additional supports, same size	11.00 "
Waist high garments	28.00 "
Additional supports, same size	26.00 "

The following information is necessary for the proper degree of compression in the support.

I—Highest point to be covered
H—Half-way between G and I
G—Usually 4½ to 5 in. above F
F—Center of knee joint
E—Garter—Small part below knee Do not take too high
D—Largest part of calf
X—Half-way C to D
C—Smallest part of ankle, above ankle bone
B—Center of instep
BB
Heel & Instep
A—Just back of ball of foot

CIRCUM., RIGHT	LENGTHS LEFT	
I	Knee (F) to I	
H		
G	Knee (F) to H	
F		
E	Knee (F) to G	
D	Floor to Knee (F)	
X	Floor to E	
C	Floor to D	
BB		
B	Floor to X	
A		

30 mm Hg—*To assist fluid dynamics (prophylaxis)*	MILD
30 mm Hg—*Post Phlebitis Syndrome*	
40 mm Hg—*Varicose Veins (Simple)*	MODERATE
40 mm Hg—*Chronic Venous Insufficiency*	
40 mm Hg—*Lymphedema—1+*	SEVERE
50 mm Hg—*Lymphedema—2+ and higher*	

We allow for Compression—Measurements should be taken snug, but not tight, and in the morning before the limb becomes swollen. Circumference measurements should be taken at points marked by letter on illustration. Lengths should be taken on INNER SIDE of leg.

THE **F. A. RITTER** CO.

Manufacturers of Fine Knitted Elastic Fabrics and Surgical Orthopedic Appliances Since 1919

4624 WOODWARD AVE., DETROIT 1, MICHIGAN

We also knit Custom made one-way and two-way stretch stockings . . . Service weight and fine weight . . . of linen, cotton, nylon, durene, silk . . . in natural, sun tan, pink or white. . . . also fine rubber one-way stretch stockings equipped with two-way stretch knee and top welt.

WANTED—ASCP ELIGIBLE OR REGISTERED LABoratory technologists; day employment; $15 bed, private, nonsectarian, general hospital; minimum salary $300 a month. Contact: Dr. Frazier, St. Luke's Hospital, Jacksonville 6, Florida. L

HOSPITALS AND SANATORIA FOR SALE

HOSPITAL FOR SALE—65 BED HOSPITAL; FULLY equipped; choice location; Lake Shore Drive. Address: Box 7249 O, % AMA.

PRACTICES FOR SALE

CALIFORNIA — GROWING GENERAL PRACTICE; equipment, supplies, introductions; records, all for $5,000; easy terms; grossed $25,000; San Jose area; available June 1, 1959; leaving for residency. Write: Box 7257P, % AMA.

CALIFORNIA — SOUTHERN; DESERT; GENERAL practice; $44,000 gross; open staff hospital; after four years taking residency; available now; city 20,000 people. Box 7258P, % AMA.

CALIFORNIA — LOS ANGELES SUBURB, ACTIVE general practice; established 10 years; equipment, x-ray, records, appointments; large office space, reasonable rental; open staff hospitals; immediate income; will introduce; flexible terms. Box 7225 P, % AMA.

IOWA—GENERAL PRACTICE IN EASTERN IOWA grossing $70,000 a year; equipment in very good condition; two open staff hospitals; leaving to specialize; will introduce and will sell on contract. Box 7200 P, % AMA.

NEW YORK — ROCHESTER, EXCELLENT 15 YEAR general practice; best location; modern, well equipped main floor 5 room office; well kept records; beautiful 8 bedroom house attached; 2 porches, immediately available due to sudden death; reasonable terms can be arranged. Box 7265P, % AMA.

NEW YORK — LONG ISLAND; LUXURIOUSLY equipped, air-conditioned, designed home-office combination; two acres; recently deceased ex-pres nearby 90 bed hospital; active general practice 12 years in populous growing suburb. Contact: S. E. Gerber, 100 Avenue P, Brooklyn, New York. P

SOUTH DAKOTA — WELL ESTABLISHED 10 YEAR unopposed general practice south eastern South Dakota; 20 miles from two large open staff hospitals; 8 room completely equipped office, should gross $40,000 first year; will introduce; large 4 bedroom home available; terms arranged practice can pay; leaving for specialty. Box 7160 P, % AMA.

TEXAS—RIO GRANDE VALLEY; MILD CLIMATE; rural area; near Gulf; general practice grossed over $40,000; terms available; good fishing. Stephen A. Youngberg, MD, Box 1005, Port Isabel, Texas, phone Whitehall 3-2855. P

VIRGINIA—EENT OR ENT; OPPORTUNITY AVAILable immediately; lucrative practice; location mid-Virginia; am retiring gradually due to health. Box 7246 P, % AMA.

WASHINGTON—GENERAL AND SURGICAL PRACtice; city of 50,000; lease small clinic building to one or two doctors; completely modern and fully equipped; good hunting, fishing, winter sports; retiring; going fishing. Box 6027 P, % AMA.

WASHINGTON — GENERAL OR PEDIATRIC PRACtice grossing $40,000; population town 12,000; drawing area 20,000; modern 50 bed hospital; purchase new equipment, rent modern office; hunting, fishing, water sports; will introduce, leave records; reasonable terms; cash unnecessary; leaving for residency July, 1959. Box 7162 P, % AMA.

APPARATUS ETC., FOR SALE

USED PHYSICIANS HOSPITAL AND LABORATORY equipment bought and sold; large stock on hand. Harry Wells, 400 East 59th Street, New York City 22, New York. Q

LARGEST STOCK OF USED-RECONDITIONED AND surplus x-ray equipment in America; all makes and models of diagnostic and therapy units; delivered; installed, guaranteed and serviced. Write for details of new deferred payment plan and new accessory price list: The Kramer X-Ray Company, Inc., formerly Medical Salvage Co., Inc., 217 E. 23rd Street, New York 10, New York. Q

FOR RENT

FOR RENT — COMPLETELY EQUIPPED OFFICE; newly decorated and ideally located; established internal medical practice of long standing; physician seriously ill; will introduce patients. Mrs. David Kleiman, 1527 Iredell Drive, Raleigh, North Carolina. T

NORTHERN CALIFORNIA — FULLY EQUIPPED thirteen room medical building; and practice; exceptional opportunity also residence; 3 bedrooms and 2 baths, adjacent but not attached to medical building; both can be financed. Box 7234 T, % AMA.

FOR LEASE—NEW CLASS A MODERN MEDICAL building; 3,000 square feet; ideal x-ray and clinical laboratory. Write: J. A. Mario, 113 E. Valley Boulevard, El Monte, California. T

FOR LEASE—NEW MODERN MEDICAL BUILDING; 3,000 square feet; 3 medical and 1 x-ray and laboratory suite; suitable for 3 man medical group. Write J. A. Mario, 113 E. Valley Boulevard, El Monte, California. T

REAL ESTATE FOR SALE

FOR SALE—MEDICAL BUILDING; HOME AND GArage, with good active medical practice included; near Pasadena; terms. M. B. Davis Associates, we specialize in medical properties, 405 East Green Street, Pasadena, California. X

MODERN OFFICE BUILDING AND RESIDENCE FOR sale or lease; fifteen thousand population; new community hospital; two office suites; dental office, laboratory, x-ray, minor surgery, recovery room and treatment room; city has great need for a qualified surgeon. Box 7218 X, % AMA.

RADIUM

FOR SALE — RADIUM; 50 MILLIGRAMS NASOpharyngeal applicator; complete with lead container; give offer. Box 7193 Z, % AMA.

Let these labels be your guide to the wholesome "All-Family Drink"

For easy recognition every bottle of 7-Up displays its name on the front.

But we're striving for something more than simple identification. We want you to *know* exactly what goes into this refreshing soft drink. How pure it is. How wholesome.

That's why each 7-Up container carries a "second" label on the back—an ingredients listing.

Seven-Up is just what this label says it is . . . quality which you may unhesitatingly recommend.

Quality... on the label ...in the bottle

SEVEN-UP CONTAINS:

CARBONATED WATER. Uniformly treated to be colorless, odorless, tasteless. The carbonation stimulates digestion . . . makes drinking 7-Up *more* than a pleasure.

SUGAR. Meets standards far more rigid than those for table sugar. Tested and retested in 7-Up laboratories to insure absolute quality.

CITRIC ACID. The natural acid present in citrus fruits. In 7-Up it complements the flavor essence extracted from fresh lemons and limes.

SODIUM CITRATE. A small amount of this valuable citrate helps develop the superb flavor of 7-Up.

FLAVOR DERIVED FROM LEMON AND LIME OILS. *Natural* oils pressed from fresh lemons and limes, and super-refined to derive the very essence of their pure, natural flavors.

7up
SEVEN-UP
YOU LIKE IT IT LIKES YOU
CONTAINS CARBONATED WATER, SUGAR, CITRIC ACID, SODIUM CITRATE, FLAVOR DERIVED FROM LEMON AND LIME OILS
"Fresh Up" WITH 7up
CONTENTS 7 FL. OZS.
SEVEN-UP BOTTLING CO.
ST. LOUIS, MO.

Nothing does it like Seven-Up!

for prevention
of
angina attacks
more effective
than vasodilators alone

Miltrate*

MILTOWN® + PETN

Meprobamate

The long-acting nitrate, PETN, helps maintain normal myocardial metabolism while Miltown relieves fear, anxiety and tension. As a result, Miltrate controls both physical and emotional causes of angina attacks.

Miltrate increases exercise tolerance

- reduces nitroglycerin dependence
- is notably safe for prolonged use
- provides convenient one-tablet dosage

Supplied: Bottles of 50 tablets.

Each tablet contains: 200 mg. Miltown + 10 mg. pentaerythritol tetranitrate.

Usual dosage: 1 or 2 tablets q.i.d. *before meals* and at bedtime. Dosage should be individualized.

References:

1. Shapiro, S.: Observations on the use of meprobamate in cardiovascular disorders. Angiology 8:504, Dec. 1957.
2. Friedlander, H. S.: The role of atarasics in cardiology. Am. J. Cardiol. 1:395, March 1958.
3. Eskwith, I. S.: The holistic approach to angina pectoris. Am. Heart J. 55:621, April 1958.

WALLACE LABORATORIES, *New Brunswick, N. J.*

*TRADE-MARK

CML-0237-19

automation

at its finest in the new,

NEW PEL-CLAVE

MODEL GN

All the splendid features of the popular, double jacketed FL-2 and HP-2 autoclaves PLUS:

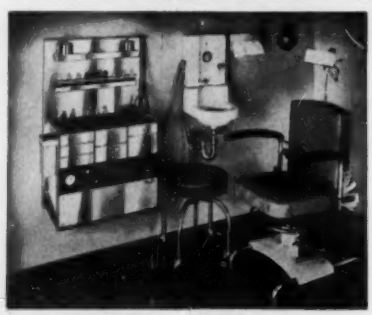
+ SINGLE KNOB CONTROL.
+ AUTOMATIC TIMER.
+ SAFETY DOOR. CANNOT BE OPENED UNDER PRESSURE.
+ THERMOMETER IN DISCHARGE LINE.
+ LARGE (7 X 14) CHAMBER.
+ STAINLESS STEEL CONSTRUCTION.

To sterilize, simply turn control knob to STER, set timer for length of cycle. When exhaust light indicates conclusion of the cycle, turn control knob to EXHAUST, unload the chamber. Complete operation is simplicity in the highest degree.

SEE THIS NEW MODEL AT YOUR DEALER OR WRITE DIRECTLY TO:

the Pelton & Crane company

CHARLOTTE 3, NORTH CAROLINA



CHAIR • Upholstered, reclining.....$150
CABINET • Stainless steel, eight drawers, with or without complete transilluminator, cautery rheostat, waste container, air regulator, gauge, tubing and cutoff.....$115 to $195
LIGHT • Telescopic.....$16.50
CUSPIDOR • With suction.....$95

CATALOGUE SENT UPON REQUEST

SURGICAL MECHANICAL RESEARCH, INC.

1905 Beverly Blvd., Los Angeles 57, Calif.

ESTABLISHED 30 YEARS

A Color Atlas of Morphologic Hematology

WITH A GUIDE TO CLINICAL INTERPRETATION

New Revised Edition

By GENEVA A. DALAND. Edited by THOMAS HALE HAM.

This new revised edition of the *Color Atlas* furnishes a guide for reference in the study of films of peripheral blood. The sixteen plates in full color by Etta Piotti include two new plates and another that is completely revised and redrawn. Up-to-date descriptions, interpretations, and laboratory data are given for each plate. The book constitutes a comprehensive and valuable aid to the technologist, the student, and the physician in distinguishing the anemias, the leukemias, infectious mononucleosis, and certain physiologic changes in the peripheral blood. $6.50

HARVARD UNIVERSITY PRESS

79 Garden St., Cambridge 28, Mass.

BOOKS RECEIVED

Books received by THE JOURNAL *are acknowledged in this column. Selections will be made for more extensive review in the interests of* THE JOURNAL *readers as space permits. Books listed in this department are not available for lending or sale through the American Medical Association.*

Streptomycin and Dihydrostreptomycin. By Louis Weinstein, Ph.D., M.D., Professor of Medicine, Tufts University School of Medicine, Boston, and N. Joel Ehrenkranz, M.D., Assistant Professor of Medicine, University of Miami School of Medicine, Coral Gables, Florida. Foreword by Chester S. Keefer, M.D. Antibiotics monographs no. 10. Under editorial direction of Henry Welch, Ph.D. and Félix Martí-Ibáñez, M.D. Cloth. $4. Pp. 116, with 13 illustrations. Medical Encyclopedia, Inc., 30 E. 60th St., New York 22; Distributors outside U. S. A.: Interscience Publishers, Inc., 250 Fifth Ave., New York 1; Interscience Publishers, Ltd., 88-90 Chancery Lane, London, W. C. 2, England, 1958.

Trapianti ossei: Relazione al XLIII Congresso della Società italiana di ortopedia e traumatologia, Padova 19-21 Ottobre 1958. 1: Generalità e biologia. Ferdinando Vigliani, relatore. 2: Autoplastici nell'uomo. Gabriele Stringa, relatore. 3: Omoplastici nell'uomo. Silvano Mastragostino, relatore. 4: Eteroplastici nell'uomo. Ernesto Agrifoglio, relatore. 5: Bibliografia. [In five parts.] Paper. Pp. 178, with 64 illustrations; 147. with 91 illustrations; 140, with 55 illustrations; 137, with 52 illustrations; 78. Società italiana di ortopedia e traumatologia, presso l'Istituto di clinica ortopedica, Città Universitaria, Viale delle Scienze, Rome, Italy, 1958.

Franciscus Cornelis Donders. [By] Dr. F. P. Fischer en Dr. G. ten Doesschate. Met een woord vooraf van Prof. Dr. H. J. M. Weve. Uitgegeven ter gelegenheid van het eeuwfeest op 6 November 1958 van het Nederlandsch Gasthuis voor Behoeftige en Minvermogende Ooglijders, Gevestigd te Utrecht. [Published on occasion of centenary of Netherlands Ophthalmic Hospital at Utrecht, Nov. 6, 1958.] Including reprint of Sir William Bowman's "In memoriam F. C. Donders," from Proceedings of Royal Society, vol. XLIX, 1891. Cloth. Hfl. 17.50. Pp. 223, with illustrations. Koninklijke van Gorcum & Co. N. V., Assen, Netherlands, 1958.

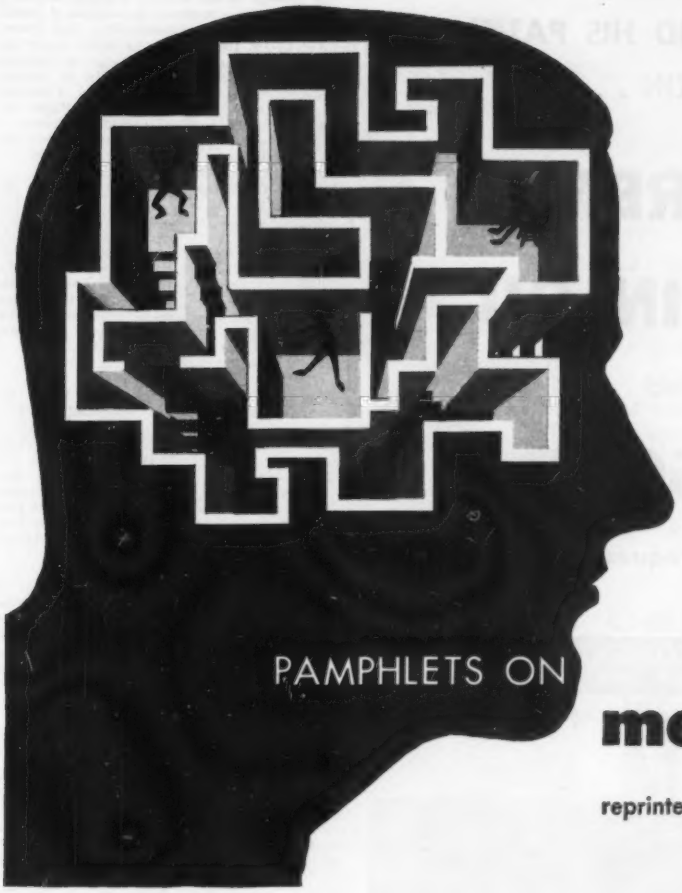
Die Morphologie der Missbildungen des Menschen und der Tiere: Ein Hand- und Lehrbuch für Morphologen, Physiologen, Praktische Ärzte und Studierende. Unter Mitwirkung zahlreicher Fachgenossen. Begrundet von Weil. Prof. Dr. Ernst Schwalbe. Herausgegeben von Prof. Dr. Georg B. Gruber, Direktor des Pathologischen Instituts der Universität Göttingen a. D. III. Teil: Die Einzelmissbildungen. XIX. Lieferung, 1. Abteilung, 7. Kapitel, 2. Hälfte: Missbildungen der Extremitäten. Paper. 31.60 marks. Pp. 683-1004, with 250 illustrations. VEB Gustav Fischer Verlag, Villengang 2, Jena, East Germany, 1958.

Chloromycetin (Chloramphenicol). By Theodore E. Woodward, M.D., and Charles L. Wisseman, Jr., M.D. With collaboration of Harry M. Robinson, Jr., M.D., and others. Foreword by Joseph E. Smadel, M.D. Antibiotics monographs no. 8. Under editorial direction of Henry Welch, Ph.D., and Félix Martí-Ibáñez, M.D. Cloth. $4. Pp. 159, with 19 illustrations. Medical Encyclopedia, Inc., 30 E. 60th St., New York 22; Distributors outside U. S. A.: Interscience Publishers, Inc., 250 Fifth Ave., New York 1; Interscience Publishers, Ltd., 88-90 Chancery Lane, London, W. C. 2, England, 1958.

The Industrial Environment, Its Evaluation and Control: Syllabus for Short Course for Industrial Hygiene Engineers and Chemists. Presented at Occupational Health Field Headquarters, Cincinnati, Ohio. U. S. Department of Health, Education, and Welfare, Public Health Service, Bureau of State Services, Division of Special Health Services, Occupational Health Program. Public Health Service publication no. 614. Paper. $2.75. Various pagination, with illustrations. Superintendent of Documents, Govern. Print. Off., Washington 25, D. C., 1958.

Samuel Taylor Darling. By Gerald L. Baum, M.D. Paper. Pp. 35, with 11 illustrations. Author, 3035 Vernon Pl., Cincinnati, Ohio, 1958.

(Continued on page 272)



PAMPHLETS ON

mental health

reprinted from Today's Health

EMOTIONAL HEALTH

by T. R. RETLAW A discussion of release of tension through work and play. *8 pp. 15¢*

EMOTIONAL ILLNESS

by EDITH M. STONEY An explanation of the difference between functional or psychosomatic illness, and organic illness. *8 pp. 15¢*

JOE'S NERVOUS BREAKDOWN

by JOHN E. EICHENLAUB, M.D. A doctor tells the sufferer's family how they can help when he comes home, how to deal with outsiders, why breakdowns occur, and how they can be prevented. *6 pp. 10¢*

THE PSYCHIATRIST

by EDWARD DENGROVE, M.D. and DORIS KULMAN What he is, how he works, and what he can mean to you. *6 pp. 10¢*

HYPNOTISM—HUMBUG or HEALING?

by JAMES A. BRUSSEL, M.D. The truth is that it can be either, depending on who uses it, for anything in the hands of a phony is about as good as a three-dollar bill. *6 pp. 10¢*

THE DOCTOR TACKLES THE EMOTIONAL ELEMENT

by WILFRED DORFMAN, M.D. Increasing medical knowledge of the role of the mind in many illnesses. *6 pp. 10¢*

write to

ORDER DEPARTMENT **AMERICAN MEDICAL ASSOCIATION**

535 NORTH DEARBORN STREET, CHICAGO 10, ILLINOIS

FOR THE PHYSICIAN AND HIS PATIENTS
WITH DRY, SENSITIVE SKIN . . . . . .

NIVEA® CREME

NIVEA® SKIN OIL

and superfatted

BASIS® SOAP

Trial supply on request

DUKE LABORATORIES, INC.
SOUTH NORWALK, CONN., U. S. A.

MADE BY THE MAKERS OF ELASTOPLAST ®—THE ORIGINAL ELASTIC ADHESIVE

NEW
TOPICAL
DIMENSIONS
in
Antiinflammatory
Antipruritic
Antiallergic
Bactericidal
Fungicidal
Protozoacidal
action
INCORPORATED IN EXCLUSIVE ACID MANTLE® VEHICLE
pH 5.0
CREME
COR-TAR-QUIN™
ACID MANTLE® • hydrocortisone • stainless tar • diiodohydroxyquinoline
In subacute and chronic dermatoses, "especially where on inflammatory reaction was accompanied by increased scaling and lichenification with secondary infection such as is seen in seborrheic dermatitis, atopic dermatitis, contact dermatitis, and neurodermatitis."
— Reid, C. R., and Fleischmajer, R.: Personal Communication.
Sig. Apply b. i. d. ½ oz., 1 oz., 2 oz., & 4 oz. tubes either 0.5% or 1.0% hydrocortisone
Cor-tar-quin
pH 5.0
CREME
1%
also available
COR-TAR-QUIN
LOTION
DOME Chemicals Inc.
109 WEST 64 ST., NEW YORK 23, N.Y.
In Canada: 2765 Bates Rd., Montreal, P.Q.

(Books Received Continued)

The Ecology of the Medical Student: Report of the Fifth Teaching Institute, Association of American Medical Colleges, Atlantic City, New Jersey, October 15-19, 1957. Edited by Helen Hofer Gee and Robert J. Glaser, with assistance of Planning Committee. Editorial coordination by E. Shepley Nourse. Published as part 2 of Journal of Medical Education, October 1958. Cloth: $3. Paper: $2. Pp. 262, with illustrations. Office of Director of Research, Association of American Medical Colleges, 2530 Ridge Ave., Evanston, Ill., 1958.

Modern Chemotherapy of Tuberculosis. By Roger S. Mitchell, B.A., M.D., F.A.C.P., and J. Carroll Bell, B.S., M.D., M.S. Foreword by William B. Tucker, M.D. Antibiotics monographs no. 11. Under editorial direction of Henry Welch, Ph.D. and Félix Martí-Ibáñez, M.D. Cloth. $4. Pp. 109, with illustrations. Medical Encyclopedia, Inc., 30 E. 60th St., New York 22; Distributors outside U. S. A.: Interscience Publishers, Inc., 250 Fifth Ave., New York 1; Interscience Publishers, Ltd., 88-90 Chancery Lane, London, W. C. 2, England, 1958.

Penicillin. By Harold L. Hirsh, M.D., and Lawrence E. Putnam, M.D. Foreword by Harry F. Dowling, M.D. Antibiotics monographs no. 9. Under editorial direction of Henry Welch, Ph.D., and Féliz Martí-Ibáñez, M.D. Cloth. $4. Pp. 148, with 9 illustrations. Medical Encyclopedia, Inc., 30 E. 60th St., New York 22; Distributors outside U. S. A.: Interscience Publishers, Inc., 250 Fifth Ave., New York 1; Interscience Publishers, Ltd., 88-90 Chancery Lane, London, W. C. 2, England, 1958.

Air Pollution Measurements of the National Air Sampling Network: Analysis of Suspended Particulate Samples Collected 1953-1957. U. S. Department of Health, Education, and Welfare, Public Health Service, Bureau of State Services, Division of Sanitary Engineering Services, Robert A. Taft Sanitary Engineering Center, Cincinnati 26. Public Health Service publication no. 637. Paper. $2. Pp. 259, with 14 illustrations. Superintendent of Documents, Govern. Print. Off., Washington 25, D. C., 1958.

Nutrition and Atherosclerosis. By Louis N. Katz, M.D., Director, Cardiovascular Department, Medical Research Institute, Michael Reese Hospital, Chicago, Jeremiah Stamler, M.D., Director, Heart Disease Control Program, Chicago Board of Health, and Ruth Pick, M.D., Assistant Director, Cardiovascular Department, Medical Research Institute, Michael Reese Hospital. Cloth. $5. Pp. 146, with 67 illustrations. Lea & Febiger, Washington Sq., Philadelphia 6, 1958.

Public Health Service Regulations. Part 73: Pertaining to Federal Control of the Sale, Barter, or Exchange of Biologic Products. U. S. Department of Health, Education, and Welfare, Public Health Service, Division of Biologics Standards of National Institutes of Health. Public Health Service publication no. 437, formerly titled "Regulations of Biological Products." Paper. Various pagination. Division of Biologics Standards, National Institutes of Health, Bethesda 14, Md., 1958.

Lesions of the Lower Bowel. By Raymond J. Jackman, M.D., M.S., Associate Professor of Proctology, Mayo Foundation, Graduate School, University of Minnesota, Rochester. Cloth. $15.50. Pp. 347, with 131 illustrations. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill.; Blackwell Scientific Publications, Ltd., 24-25 Broad St., Oxford, England; Ryerson Press, 299 Queen St., W., Toronto 2B, Canada, 1958.

Hormone und Psyche: Die Endokrinologie des alternden Menschen. Fünftes Symposion der Deutschen Gesellschaft für Endokrinologie, Freiburg (Breisgau), den 7. bis 9. März 1957. Schriftleitung: Dozent Dr. H. Nowakowski. Paper. 69 marks. Pp. 355, with 191 illustrations. Springer-Verlag, Heidelberger Platz 3, (1) Berlin-Wilmersdorf (West Berlin); Neuenheimer Landstrasse 24, Heidelberg; Göttingen, Germany, 1958.

Photoreception. Ann. New York Acad. Sc., vol. 74, art. 2. Editor in chief: Otto v. St. Whitelock. Managing editor: Franklin N. Furness. Associate editor: Grace McGraw Smith. Conference chairman and consulting editor: Jerome J. Wolken. Paper. $3.50. Pp. 161-406, with illustrations. New York Academy of Sciences, 2 E. 63rd St., New York 21, 1958.

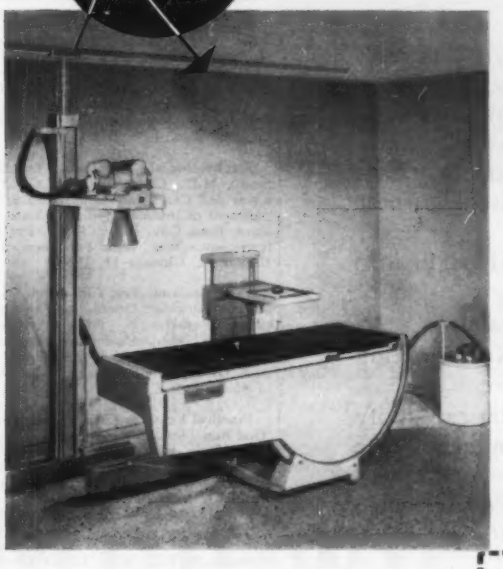
(Continued on page 274)

All this for one monthly fee

- ✓ Enjoy the most modern x-ray facilities . . . avoid obsolescence losses
- ✓ No surprise "extras" — covers periodic inspection, maintenance, replacement tubes, parts
- ✓ Freedom to add or replace equipment as improvements appear
- ✓ G.E. pays for insurance . . . assumes problem of collecting for equipment damage
- ✓ G.E. pays local property taxes

From This to This

without capital outlay



the difference is Maxiservice® rental

Here's the perfect answer for a cost-saving x-ray installation, easy to keep abreast of important new developments. G-E Maxiservice ties up *none* of your capital . . . eliminates trade-in losses — progress determines your time for exchange, not finances. In effect, you contract for *utility, convenience, flexibility* and *service,* not for just equipment.

For complete details, contact your G.E. X-Ray representative, or clip coupon below for your copy of our new Maxiservice booklet.

Progress Is Our Most Important Product

GENERAL ELECTRIC

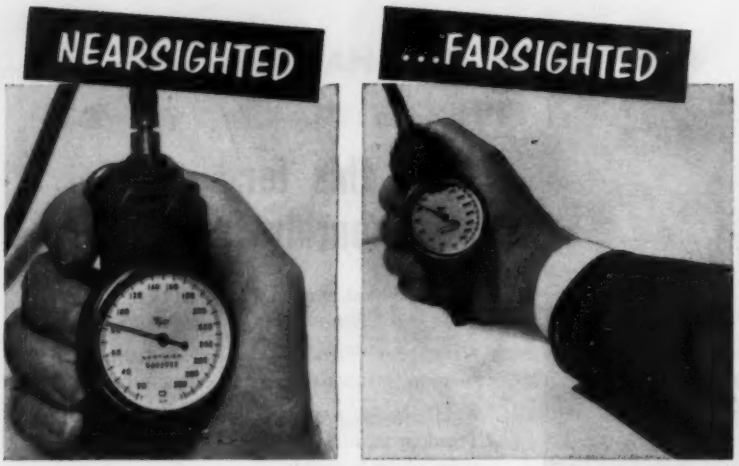
X-RAY DEPARTMENT
GENERAL ELECTRIC CO.
Milwaukee 1, Wisconsin, Room P-27

Send your new 12-page MAXISERVICE booklet to:

Name_____

Address_____

_____



The new *Tycos*® Hand Aneroid is ideal at any distance!

HERE is a real convenience, especially for doctors who wear bifocals. The gage of the new Tycos Hand Model Aneroid is read easily at any distance—whether close up or at arm's length. This is especially convenient when examining very sick patients in bed. The new Tycos Hand Model Aneroid also has these valuable features:

- Inflating bulb and air release valve built right into the back of the gage.
- Balanced to fit comfortably in either hand.
- New feather-touch valve control. New floating stainless steel ball replaces old needle valve.
- Single tube with Luer lock fitting—you can apply the cuff on your patient's arm before you attach the gage.
- Accurate in any position . . . always accurate when pointer returns to zero. Famous Tycos 10-year triple warranty.

Made by skilled American instrument technicians—service available in all parts of the country. Genuine leather zipper case and Hook Cuff. Weighs only 18 ounces. **$47.50.**

Taylor Instrument Companies
Rochester 1, N.Y. Toronto, Canada

Tycos
UNSURPASSED ACCURACY FOR HALF A CENTURY
1907-1957

Taylor Instruments MEAN ACCURACY FIRST

(Books Received Continued)

Resuscitation of the Newborn Infant. Prepared by Committee on Fetus and Newborn of American Academy of Pediatrics, with cooperation of American College of Obstetricians and Gynecologists, American Society of Anesthesiologists, American Hospital Association, and American Public Health Association. Paper. Pp. 24, with illustrations. American Academy of Pediatrics, 1801 Hinman Ave., Evanston, Ill., 1958.

Das Klapp'sche Kriechverfahren. Von Dozent Dr. Bernhard Klapp. Unter Mitarbeit von Ella Biederbeck und Ingebord Hess. Third edition. Paper. 13.50 marks; $3.20. Pp. 80, with 116 illustrations. Georg Thieme Verlag, Herdweg 63, (14a) Stuttgart, West Germany; [Intercontinental Medical Book Corporation, 381 Fourth Ave., New York 16], 1958.

Pathologie der Laboratoriumstiere. Erster Band. Bearbeitet von W. Bargmann et al. Herausgegeben von P. Cohrs, R. Jaffé, und H. Meessen. Cloth. Band I/II: 298 marks. Pp. 799, with 356 illustrations. Springer-Verlag, Heidelberger Platz 3, (1) Berlin-Wilmersdorf (West Berlin); Neuenheimer Landstrasse 24, Heidelberg; Göttingen, Germany, 1958.

The Psychoanalytic Study of the Child. Volume XIII. Managing editors: Ruth S. Eissler, M.D., Anna Freud, LL.D., Heinz Hartmann, M.D., and Marianne Kris, M.D. [With editorial board from United States and Great Britain.] Editorial assistant: Lottie Maury Newman. Cloth. $8.50. Pp. 573, with illustrations. International Universities Press, Inc., 227 W. 13 St., New York 11, 1958.

Atti del XLII Congresso della Società italiana di ortopedia e traumatologia, 29-30-31 Ottobre 1957. Publicati dal Comitato direttivo permanente e redatti a cura del segretario della Società Prof. A. Rampoldi. Paper. Pp. 384, with illustrations. Società italiana di ortopedia e traumatologia, presso l'Istituto di clinica ortopedica, Città Universitaria, Viale delle Scienze, Rome, Italy, n. d.

Leukemia. By William Dameshek, M.D., Professor of Medicine, Tufts University School of Medicine, Boston, and Frederick Gunz, M.D., Ph.D., Hematologist, Christchurch Hospital, Christchurch, New Zealand. Cloth. $15.75. Pp. 420, with 143 illustrations. Grune & Stratton, Inc., 381 Fourth Ave., New York 16; 99 Great Russell St., London, W. C. 1, England, 1958.

Staphylococcal Infections. By Ian Maclean Smith, M.D., Ch.B., F.R.F.P.S.G., Assistant Professor and Chief, Infectious Disease Division, Department of Internal Medicine, State University of Iowa, Iowa City. Paper. $4.25. Pp. 180, with illustrations. Year Book Publishers, Inc., 200 E. Illinois St., Chicago 11, 1958.

Psoriasis. Ann. New York Acad. Sc., vol. 73, art. 5. Editor in chief: Otto v. St. Whitelock. Managing editor: Franklin N. Furness. Associate editor: Francis S. Stahl. Conference chairman and consulting editor: Peter Flesch. Paper. $2.75. Pp. 911-1037, with illustrations. New York Academy of Sciences, 2 E. 63rd St., New York 21, 1958.

Practical Leads to Puzzling Diagnoses: Neuroses That Run Through Families. By Walter C. Alvarez, M.D., D.Sc. Cloth. $9. Pp. 490. J. B. Lippincott Company, E. Washington Sq., Philadelphia 5; 4865 Western Ave., Montreal 6, Canada; Pitman Medical Publishing Company, Ltd., 45 New Oxford St., London, W. C. 1, England, 1958.

Reversicon: A Medical Word Finder. By J. E. Schmidt, Ph.B.S., M.D., Litt.D. Cloth. $7.50. Pp. 440. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill.; Blackwell Scientific Publications, Ltd., 24-25 Broad St., Oxford, England; Ryerson Press, 299 Queen St., W., Toronto 2B, Canada, 1958.

Problèmes actuels d'endocrinologie et de nutrition. 2e série. Sous la direction de Guy Laroche, H. P. Klotz et J. Trémolières. Avec la collaboration de E. E. Baulieu, et al. Paper. 1600 francs. Pp. 216, with 48 illustrations. L'Expansion scientifique française, 15, rue Saint-Benoit, Paris 6e, France, 1958.

L'angiographie cérébrale. Par Joël Bonnal et Jacques Legré. Préface du Pr. J. E. Paillas. Cloth. 6000 francs. Pp. 254, with 223 illustrations. Masson & Cie, 120, boulevard Saint-Germain, Paris 6e, France, 1958.

(Continued on page 276)

THE HEART DISEASE PATIENT NEEDS RELIEF FROM EMOTIONAL STRESS

ANXIETY INTENSIFIES the physical disorder in heart disease. "The prognosis depends largely on the ability of the physician to control the anxiety factor, as well as the somatic disease."

(Friedlander, H. S.: The role of ataraxics in cardiology. Am. J. Cardiol. 1:395, March 1958.)

TRANQUILIZATION WITH MILTOWN enhances recovery from acute cardiac episodes and makes patients more amenable to necessary limitations of activities.

(Waldman, S. and Pelner, L.: Management of anxiety associated with heart disease. Am. Pract. & Digest Treat. 8:1075, July 1957.)

Miltown®

meprobamate (Wallace)

Available in 400 mg. scored and 200 mg. sugar-coated tablets. Also available as MEPROSPAN® (200 mg. meprobamate *continuous release* capsules). In combination with a nitrate, for angina pectoris: MILTRATE® (Miltown 200 mg. + PETN 10 mg.).

Miltown causes no adverse effects on heart rate, blood pressure, respiration or other autonomic functions.

®TRADE-MARK CM-5275

WALLACE LABORATORIES, *New Brunswick, N. J.*

SAVE ON
PROFESSIONAL STATIONERY AND RECORD SUPPLIES

FREE

- DAILY LOG RECORD BOOK
- APPOINTMENT BOOKS
- PRINTED STATIONERY
- PATIENTS' RECORDS
- BILLING SUPPLIES
- PAYMENT RECORDS

Accurate, clean-cut letterpress work on highest quality materials. Satisfaction guaranteed.

THE COLWELL COMPANY
236 UNIVERSITY AVE., CHAMPAIGN, ILLINOIS

FOR THE DOCTOR'S LIBRARY

Lundstrom Sectional Bookcase

On Approval—Direct from Factory at 40% Saving

Buy direct to meet your immediate requirements and add sections as your library grows. We assume responsibility for matching.

Furnished in different designs, woods and finishes. Endorsed by over 250,000 users. Write for catalog Dept. J-159.

C. J. LUNDSTROM MFG. CO.
Little Falls, N. Y.

Made for the better homes and offices since 1899

HAVE THE OTHER FELLOW COME TO YOU

A high-class man, specialist in his line, looking for an opening, wrote to THE JOURNAL—"I have been reading your ads a long time but I don't find anybody advertising for anyone in my line."

It never occurred to him to take the initiative. When you really want action it pays to use a classified ad and have the other fellow come to you.

"I'm going to lunch, Doctor...
Don't worry about this autoclave...
A SpeedClave runs itself!"

Words of wisdom . . . straight from the nurse to you. In a nutshell, it's her story of the New SpeedClave. So simple . . . it almost runs itself!

With a new SpeedClave she just "Sets It and Forgets It." There are no valves to turn, no waiting, nothing to time, nothing to shut off—everything's automatic! She can load it, set one dial, and go out to lunch.

If you don't have a SpeedClave in your office, call your Castle dealer for a demonstration or write for further information.

Castle LIGHTS AND STERILIZERS
Wilmot Castle Co. • 1722c E. Henrietta Rd. • Rochester, N.Y.

Send me descriptive bulletin DS-246 which tells all about the SpeedClave.

Name_____

Address_____

(Books Received Continued)

Recent Advances in Paediatrics. Edited by Douglas Gairdner, M.A., D.M., F.R.C.P., Paediatrician to Addenbrooke's Hospital, Cambridge. Second edition. Cloth. $9.50. Pp. 378, with 82 illustrations. Little Brown & Company, 34 Beacon St., Boston 6; J. & A. Churchill, Ltd., 104 Gloucester Place, Portman Sq., London, W. 1, England.

Cyclopropane Anesthesia. By Benjamin Howard Robbins, B.A., M.S., M.D., Professor of Anesthesiology and Associate Professor of Pharmacology, Vanderbilt University School of Medicine, Nashville. Second edition. Cloth. $9. Pp. 293, with 74 illustrations. Williams & Wilkins Company, 428 E. Preston St., Baltimore 2, 1958.

Polysaccharides in Biology: Transactions of the Third Conference, May 29, 30, and 31, 1957, Princeton, N. J. Sponsored by Josiah Macy, Jr. Foundation. Edited by Georg F. Springer, M.D. Cloth. $4.75. Pp. 249, with 58 illustrations. Josiah Macy, Jr. Foundation, 16 W. 46th St., New York 36, 1958.

Le coeur. Tome I: Exploration du coeur et grands syndromes cardiaques (Insuffisance cardiaque, angine de poitrine, troubles du rythme syncopes et chocs). Par le Professeur Camille Lian et ses élèves. Paper. 2200 francs. Pp. 317, with 51 illustrations. L'Expansion scientifique française, 15, rue Saint-Benoit, Paris 6e, France, 1958.

Electrocardiography. By E. Grey Dimond, M.D. Director, Cardiovascular Laboratory, Professor of Medicine, University of Kansas Medical Center, Kansas City. Second edition. Cloth. Pp. 172, with illustrations. University of Kansas Medical Center, Rainbow Blvd. at 39th St., Kansas City 12, Kansas, 1958.

Directory American Council of Independent Laboratories, Inc. Guide to leading independent testing, research and inspection laboratories of America. Seventh edition. Cloth. Pp. 100. American Council of Independent Laboratories, Inc., 4302 East-West Highway, Washington 14, D. C., 1958.

Poliomyelitis: Papers and Discussions Presented at the Fourth International Poliomyelitis Conference. Compiled and edited for International Poliomyelitis Congress. Cloth. $7.50. Pp. 684, with 422 illustrations. J. B. Lippincott Company, E. Washington Sq., Philadelphia 5; 4865 Western Ave., Montreal 6, Canada, 1958.

Physiology of Fungi. By Vincent W. Cochrane, Professor of Biology, Wesleyan University, Middletown, Conn. Cloth. $9.75. Pp. 524, with illustrations. John Wiley & Sons, Inc., 440 Fourth Ave., New York 16; Chapman & Hall, Ltd., 37-39 Essex St., Strand, London, W. C. 2, England, 1958.

Services for Children with Epilepsy: A Guide for Public Health Personnel. Prepared by Committee on Child Health of American Public Health Association. Paper. Pp. 124. American Public Health Association, Inc., 1790 Broadway, New York 19, 1958.

Enzymopathologie: Enzyme in Klinik und Forschung. Von Dr. med. Roland Richterich. Cloth. 128 marks. Pp. 703, with 132 illustrations. Springer-Verlag, Heidelberger Platz 3, (1) Berlin-Wilmersdorf (West-Berlin); Neuenheimer Landstrasse 24, Heidelberg; Göttingen, Germany, 1958.

La tétanie chronique ou spasmophilie: Signes—étiologie—pathogénie—traitement. Par H. P. Klotz. Avec la collaboration de MM. M. Bouvry et al. Paper. 1300 francs. Pp. 259, with 22 illustrations. L'Expansion scientifique française, 15, rue Saint-Benoit, Paris 6e, France, 1958.

Understanding Medical Terminology. By Sister Mary Agnes Clare Frenay, S.S.M., R.N., M.S., Assistant Professor of Nursing, St. Louis University, St. Louis. Paper. Pp. 202, with 43 illustrations by Margery Hocker. Catholic Hospital Association, 1438 S. Grand Blvd., St. Louis 4, 1958.

Careers: Careers in Medical Research. Institute for Research, research number 148. Editorial board: John A. Lapp, Ph.B., LL.D., John A. Prescott, A.B., and H. B. Woodward, Jr., M.A., Ed.D. Paper, Pp. 24, with illustrations. Institute for Research, 537 S. Dearborn St., Chicago, 1958.

(Continued on page 306)

the quality of greatness

is rare in any human endeavor. When it appears, it may be perceived in various forms—as a work of art, a discovery, an idea, or an achievement of scientific inquiry. The outward form is incidental, but the intrinsic quality is readily recognized....

To partake of the quality of greatness, a therapeutic preparation must first of all achieve a degree of universality... the cumulative experience of thousands of physicians over a period of many years. From this experience, then, is born that unhesitating confidence which may be summed up in the term a "drug of choice."

Gantrisin

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc • Nutley 10 • N.J.

ROCHE—Reg. U. S. Pat. Off.

GANTRISIN®—brand of sulfisoxazole

for best results

use classified ads

in the Journal

of the

American Medical Association

If you desire a new location or position . . .

If you need a partner or successor . . .

If you want to buy or sell apparatus, instruments or books . . .

A CLASSIFIED AD IS YOUR ANSWER

for advertising rates write to

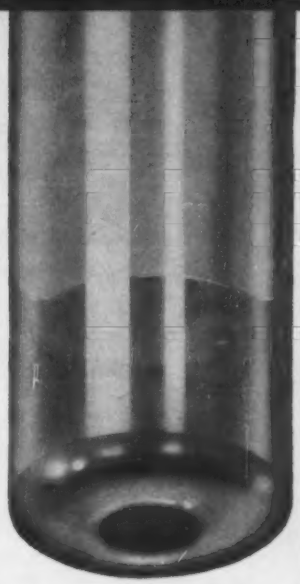
THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

535 NORTH DEARBORN STREET, CHICAGO 10, ILLINOIS

when all the fuss is about colds,
teething, postinoculation reactions,
pruritic conditions

℞
NEW, dropper-administered

Corilin*
INFANT LIQUID



- *provides quick comfort for baby*
- *eliminates medication difficulties for mother*

Antihistaminic-analgesic-antipyretic preparation designed with *both* baby *and* mother in mind. Each cc. of raspberry-flavored solution contains 0.75 mg. CHLOR-TRIMETON® (chlorprophenpyridamine maleate), 80 mg. sodium salicylate and 25 mg. glycine. 30 cc. bottle with plastic calibrated dropper.

Schering

SCHERING CORPORATION
BLOOMFIELD, NEW JERSEY

*T.M. CR-J-1109

THE BRIGHT SIDE

by E. K. H.

A fluttery woman reporter was interviewing the hard-boiled author of a recent best-seller. After disposing of the usual questions, the reporter gave a little giggle.

"Of course," she said coyly, "you know the saying, 'Behind every successful man there stands a woman.' Tell me, now, to whom do you feel *you* owe your success?"

The author eyed the woman sourly.

"I owe most of all," he snapped, "to the Bureau of Internal Revenue!"

•

It's Robert Q. Lewis' story about the young couple who had just moved into a new neighborhood when the bride was suddenly taken ill. Quickly her husband called in the first doctor he could find and waited apprehensively outside the bedroom door.

In a few seconds the doctor emerged. "I say old man—have you a hammer?" he asked casually.

Shortly afterwards he reappeared. "I'd like a chisel now, please."

Five minutes later again he called out. "I'm afraid I'll have to trouble you for a screwdriver."

The distraught husband could stand the suspense no longer.

"For heaven's sake, doctor," he cried. "What's wrong with my wife?"

"How do I know?" grumbled the medic. "I haven't got my blasted bag open yet!"

•

Mark Robert's small son came home from a friend's house with a hot idea.

"Jimmy has a trumpet," he said excitedly, "and we're going to start a band. Can I have a drum?"

"I should say not!" answered the father. "It's too noisy!"

The child thought for a minute.

"Suppose," he compromised, "I only play it when you're asleep."

•

The two men were walking down the courthouse steps after one had just been divorced.

"Thank heavens, that phase of my life is over," said the newly unwed. "I never liked that woman!"

"Well, then, how did she manage to rope you into marriage?"

"I guess," was the reply, "she wanted me more than I didn't want her."

A woman trying to locate her boy friend in a distant Army camp called the long-distance operator for help.

"What outfit is he in?" asked the operator.

"In his fatigues, I should think," was the answer. "He's on KP duty."

•

Variety's Army Archerd says: "Poor George Gobel leads such an unexciting private life that a well-known scandal magazine not only turned down a story on him—they even canceled his subscription."

•

We love Nick Kenny's story about the two cannibals who were sitting around chatting amiably after a hearty meal.

"That was some meal!" commented the first, licking his lips.

"Yes, my wife makes a wonderful soup," replied the host, "but I'm sure going to miss her!"

"Oh, I'm not ill. I just like to help these young doctors get started."

Author of the classic "Bodily Changes in Pain, Hunger, Fear and Rage," pathfinder in experimental physiology,

(1871-1945) demonstrated conclusively the effect of emotions on the G.I. tract.

in G.I. symptoms of anxiety states

Milpath®

®Miltown + *anticholinergic*

provides relief of pain, spasm, anxiety and tension without belladonna or barbiturates. Side effects are minimal.

each scored tablet contains:
meprobamate 400 mg., tridihexethyl chloride 25 mg.
(formerly supplied as the iodide)

1 tablet t.i.d. with meals and 2 tablets at bedtime.

duodenal and gastric ulcer • colitis
spastic and irritable colon • gastric hypermotility • gastritis
esophageal spasm • intestinal colic • functional diarrhea • G.I. symptoms of anxiety states.

Literature and samples on request.

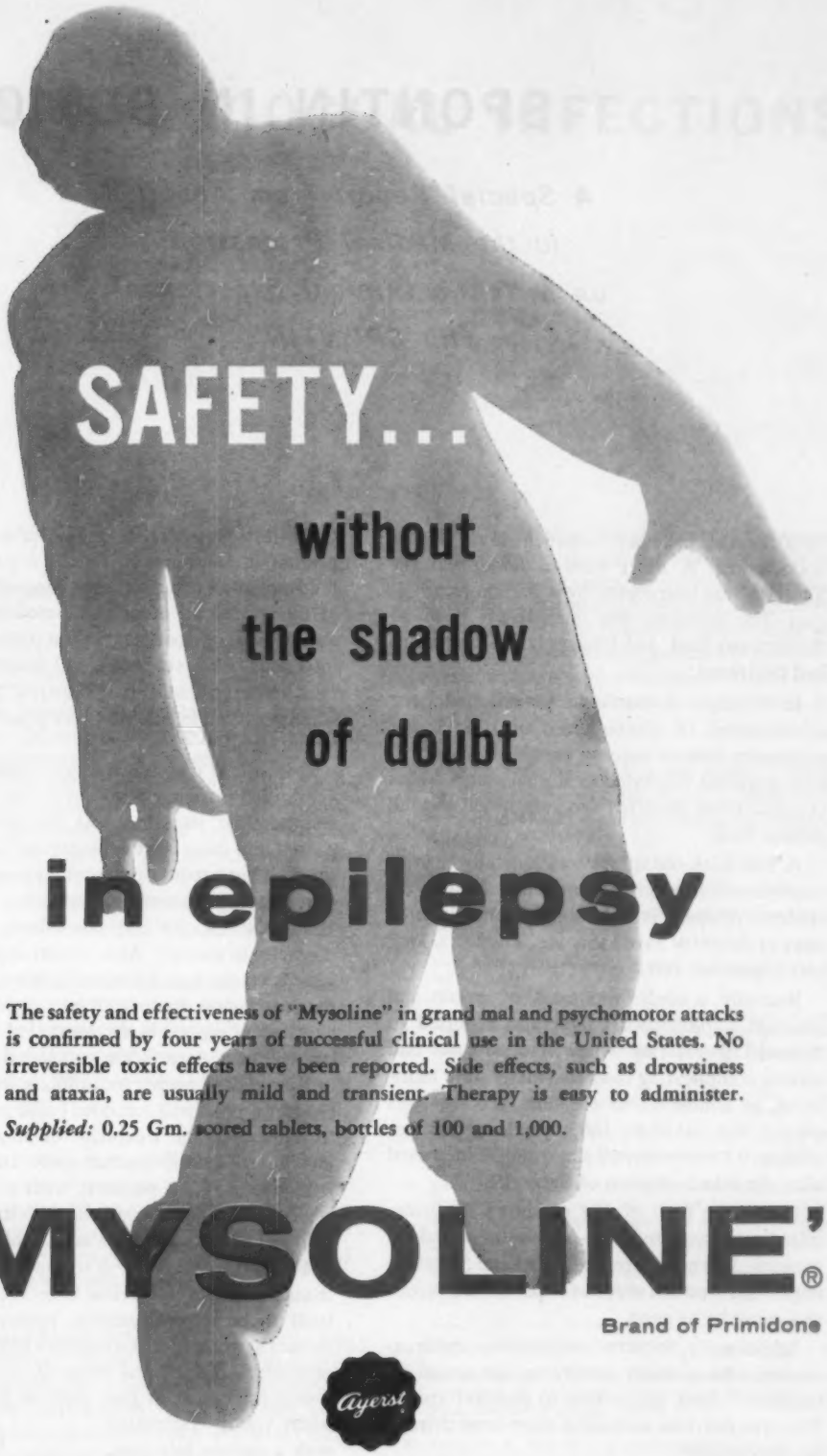
WALLACE LABORATORIES
New Brunswick, N. J.

allergic SWELLING

(PARABROMDYLAMINE MALEATE) Dimetane works

For your next patient with allergic swelling, itching or respiratory congestion associated with urticaria, Rx DIMETANE Extentabs® (12 mg.), Tablets (4 mg.), Elixir (2 mg./5 cc.) new DIMETANE-TEN Injectable (10 mg./cc.) or new DIMETANE-100 Injectable (100 mg./cc.).
A. H. Robins Co., Inc., Richmond 20, Virginia
Ethical Pharmaceuticals of Merit Since 1878

Robins



SAFETY...

without the shadow of doubt

in epilepsy

The safety and effectiveness of "Mysoline" in grand mal and psychomotor attacks is confirmed by four years of successful clinical use in the United States. No irreversible toxic effects have been reported. Side effects, such as drowsiness and ataxia, are usually mild and transient. Therapy is easy to administer.

Supplied: 0.25 Gm. scored tablets, bottles of 100 and 1,000.

"MYSOLINE"®

Brand of Primidone

Ayerst

AYERST LABORATORIES • NEW YORK 16, NEW YORK • MONTREAL, CANADA

"Mysoline" is available in the United States by arrangement with Imperial Chemical Industries, Ltd.

5508

SPONTIN IN SERIOUS

A Special Report from Abbott
to the Medical Profession
on a Year's Clinical Experience
with SPONTIN®
(Ristocetin, Abbott)

In a Spanish province, a patient lay dying of endocarditis. A short wave radio appeal for SPONTIN was intercepted by a Baltimore physician. The antibiotic was immediately flown to this faraway land, and 10 days later—the patient had recovered.

In Chicago, a moribund patient had been administered 18 combinations of 10 different antibiotics without success. Involved was a hospital-acquired staphylococcal pneumonia—plus complications. SPONTIN was substituted and the patient lived.

A five-week-old infant was critically ill with staphylococcal enteritis. Treatment failures included erythromycin and chloramphenicol. Three days of SPONTIN saved this life. The list is long and impressive and it grows daily.

Recently, a study[1] was made of serious and resistant staphylococcal infections reported to Abbott Laboratories. Many of these cases had serious complicating diseases—many were moribund, or almost so, at the time SPONTIN was started. Yet, out of the 160 staphylococcal cases studied, 93 were reported cured and 38 improved after the administration of SPONTIN.

Out of the total of 251 patients with severe infections caused by gram-positive or mixed organisms, 149 were reported cured and 53 others improved. And the record for pediatric practice was every bit as good.

Additionally, SPONTIN continues to exhibit exceptional bactericidal activity against coccal infections[2]. And, according to another study, SPONTIN provides successful short-term therapy in endocarditis[3].

Only last October, at the Antibiotics Symposium in Washington, D. C., a panel of six leading antibiotic experts placed SPONTIN at the top of all other commercially-available antibiotics for treating serious staphylococcal infections. Also, six papers—all dealing with the effectiveness of ristocetin (SPONTIN®) in treating staphylococcal infections—were presented at the Symposium.

One of the most encouraging aspects of the year's literature on SPONTIN is the increasing testimony to its safety. As the months have passed and cases have accumulated by the hundreds, it has become apparent that careful attention to dosage recommendations has practically eliminated toxicity and side effects as serious obstacles to therapy. Also, recent improvements have been made in the manufacture of SPONTIN; the drug is now made from pure crystals.

A recent report[4] in the Journal of the American Medical Association concluded, "It is our opinion that, if proper precautions are observed, ristocetin is a [well tolerated] and potent agent to employ in the treatment of staphylococcal infections." And in another study, after successfully treating 28 patients with a variety of staphylococcal infections, the authors reported[5], "No serious complications were noted."

Few more dramatic records have been written in such a short space of time. SPONTIN has proved itself to be a good answer, perhaps the best answer at present, to the resistant staphylococcal problem—and of real value in other serious coccal infections. It may well be your answer when you're confronted with a serious infection.

Abbott

STAPHYLOCOCCAL INFECTIONS

Excerpts from Reports Read at the Antibiotics Symposium

Spontin In Treating Severe Respiratory Infections—"In 13 of 20 patients the results were excellent, with clinical response being evident within one to four days after institution of therapy. In three additional patients, there was some degree of improvement in pneumonic processes superimposed on tuberculosis in two cases and on pulmonary neoplasm in one. In all other cases, serious antecedent pathology undoubtedly influenced the negative or equivocal response to ristocetin therapy.[6]"

Spontin In Treating Staphylococcal Infections—After successfully treating 28 patients, the authors wrote, "Ristocetin or Spontin has proved to be bactericidal and bacteriostatic, particularly for the *Staphylococcus aureus*, which is often resistant to many other antibiotics.[5]"

Spontin In Treating Seven Difficult Cases—"Ristocetin has produced excellent results in eradicating, mitigating or preventing infection in seven selected difficult cases. Six of the seven cases involved *Staphylococcus aureus* which did not respond to chemotherapy with other antibiotics.[7]"

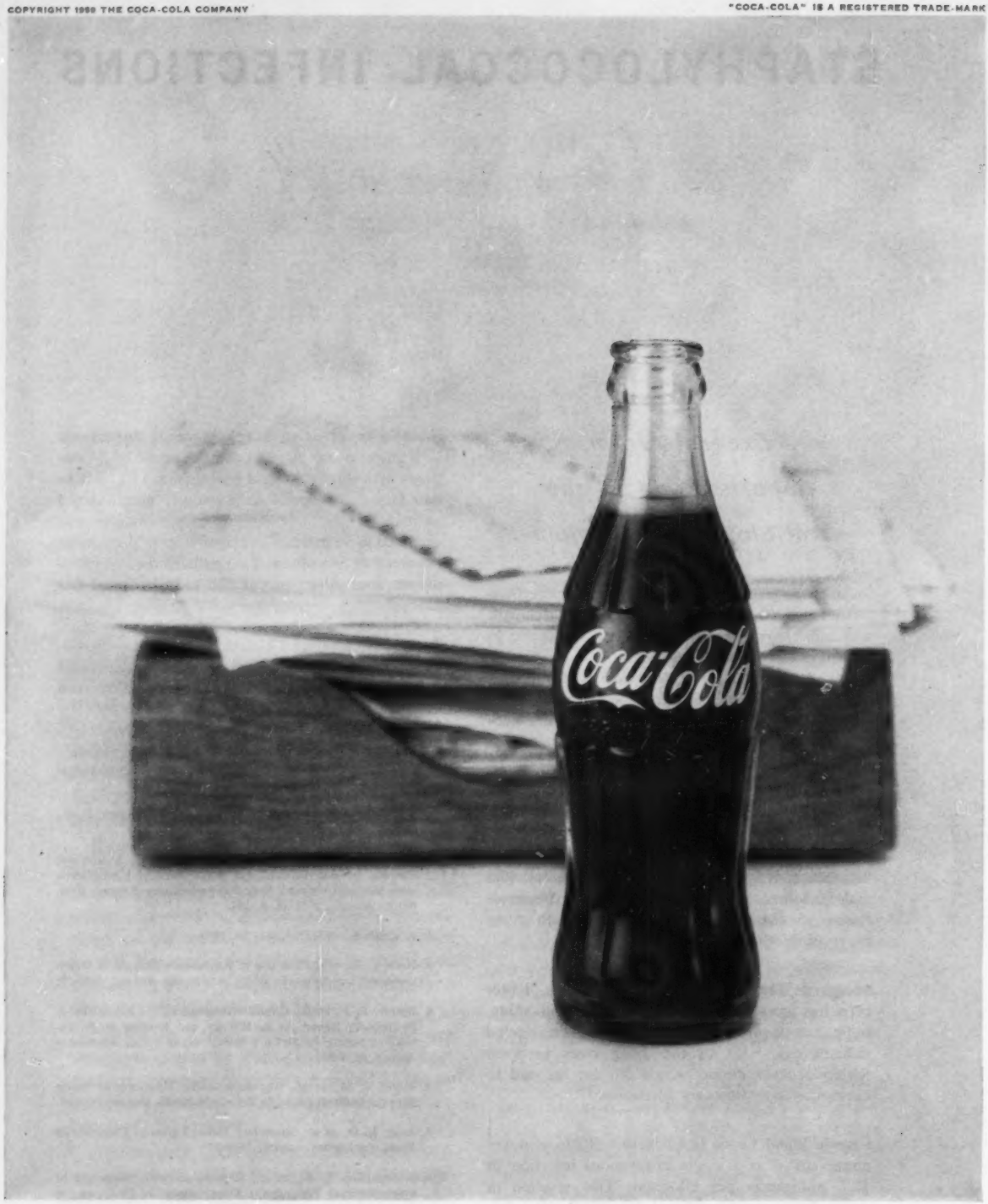
Spontin Blood Levels In Children—"Ristocetin was administered as a single intravenous injection of 12.5 milligrams per kilogram. This resulted in serum levels ranging from 1.3 to 10.6 mcg. after two hours with a gradual fall to a level of 0.7 mcg. per cubic centimeter or less after 12 hours.[8]"

Spontin In Treating Staphylococcal Pneumonia—"Ristocetin was used in the treatment of 24 patients with staphylococcal pneumonia, 17 of whom had failed to respond to previously administered antibiotics. Complete clearing of pneumonitis was obtained in 16 patients and significant improvement occurred in two others. Two patients died of pneumonia; four others succumbed to other lethal diseases.[9]"

Spontin In Treating Children and Adults—"Ristocetin completely controlled severe staphylococcal infections in 11 adults and six children who received adequate therapy.[10]"

1. Totals represent published reports and personal communications to Abbott Laboratories.
2. Sixth Annual Symposium on Antibiotics, Washington, D. C., Oct. 15, 16, 17, 1958.
3. Romansky, M. J., and Holmes, R., Successful Short-Term Therapy of Enterococcal and Staphylococcal Endocarditis with Ristocetin—Seven Patients. Preliminary Report, Antibiotics Annual, 1957-58, p. 187.
4. J. A. M. A., 167:1584, July 26, 1958.
5. Bush, L. F., et al., The Use of Ristocetin (Spontin) in Staphylococcal Infections, In Press, Antibiotics Annual, 1958-59.
6. Billow, F. J., et al., Clinical Observations on Ristocetin—A Preliminary Report on its Efficacy and Toxicity in 20 Unselected Severe Respiratory Infections, In Press, Antibiotics Annual, 1958-59.
7. Miller, J. M., et al., Ristocetin in the Treatment of Seven Selected Difficult Cases, In Press, Antibiotics Annual, 1958-59.
8. Asay, L. D., et al., Ristocetin Serum Levels in Children, In Press, Antibiotics Annual, 1958-59.
9. Schumacher, L. R., et al., Experiences with Ristocetin in Staphylococcal Pneumonia: Observations in 23 Cases, In Press, Antibiotics Annual, 1958-59.
10. Terry, R. B., Ristocetin in Children and Adults, In Press, Antibiotics Annual, 1958-59.

COPYRIGHT 1959 THE COCA-COLA COMPANY "COCA-COLA" IS A REGISTERED TRADE-MARK



Amid the busy bustle of the workaday grind,
there is nothing quite so welcome
as the quick refreshment and lift in ice-cold Coca-Cola.

A NEW SERIES IN

SEX EDUCATION

Titles in the new series

- PARENTS' PRIVILEGE
  for parents of young children of pre-school and early school age
- A STORY ABOUT YOU
  for children in grades 4, 5, and 6
- FINDING YOURSELF
  for boys and girls of approximately junior high school age
- LEARNING ABOUT LOVE
  for young people of both sexes (about 16 to 20 years of age)
- FACTS AREN'T ENOUGH
  for adults who have any responsibility for children or youth that may create a need for an understanding of sex education

prepared by
Marion O. Lerrigo, Ph.D.
Helen Southard, M.A.

medical consultant
Milton J. E. Senn, M.D.

Prepared for the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association

distributed by

ORDER DEPARTMENT
AMERICAN MEDICAL ASSOCIATION
535 N. DEARBORN ST.
CHICAGO 10, ILL.

Prices of quantity orders of any SINGLE title		Prices of quantity orders of SETS	
1 copy	$ .50	Single set	$ 2.25
10 copies	4.25	10 sets	19.12
25 copies	10.00	25 sets	45.00
50 copies	18.75	50 sets	84.37
100 copies	35.00	100 sets	157.50
250 copies	81.25	250 sets	365.62
500 copies	150.00	500 sets	675.00

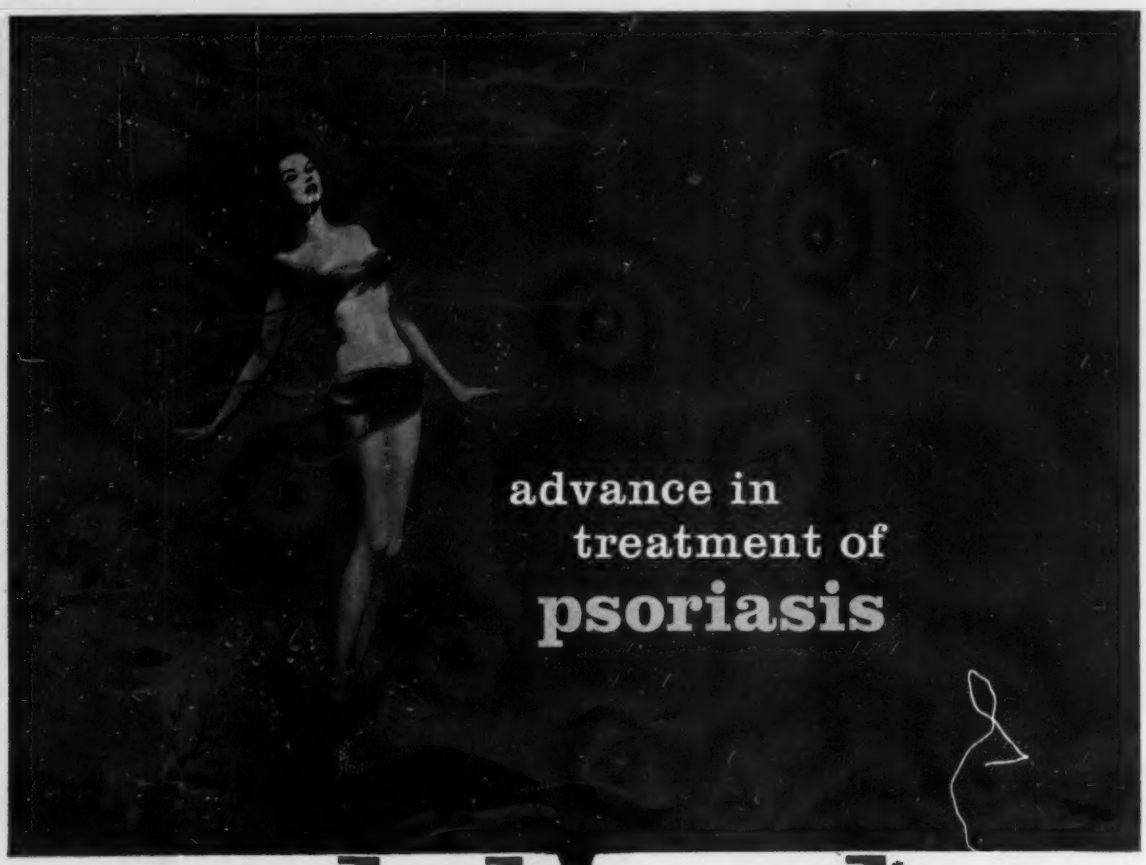
ORDER BLANK

Enclosed is $_____(no stamps) for the following pamphlet(s):

Title	Quantity
1. PARENTS' PRIVILEGE	
2. A STORY ABOUT YOU	
3. FINDING YOURSELF	
4. LEARNING ABOUT LOVE	
5. FACTS AREN'T ENOUGH	
Complete set of five	

Please send pamphlet(s) to:
(Please Print)

Name_____
Street_____
City_____
Zone_____ State_____



alphosyl*
LOTION

Affords keratin-dispersing action[1]: Keratolytic, removes nonviable tissue, promotes healing.

Successful results ranging to complete clearing obtained[2-4] in patients with: • scalp-to-toe psoriasis • psoriasis of many years' duration • psoriasis involving tender areas.

Treatment-fastness rarely occurs: Recurrences (when treatment is discontinued) clear up again on resumption of therapy.

Well tolerated: Even when applied to lesions in anogenital and submammary regions.[2] Potential hazards of other therapies – mercury, arsenic, corticosteroids, x-rays – are avoided.

A noteworthy advance cosmetically: Nongreasy, nonstaining; vanishes on application to the skin. May be used freely on the scalp.

Application: Rub into lesions 2 to 4 times daily as indicated. Where heavy scaling or crusting occurs, the usual bath, to soften and facilitate removal of scale, is recommended before applying lotion.

Residual redness and pigmentation may remain up to several months but will eventually disappear. Once the condition is under control, daily to weekly application may prove satisfactory for maintenance.

In some cases, a seeming excessive scaling and drying may occur during therapy. This is an occasional phase of the healing process and usually precedes improvement. Patients should be advised of this and encouraged to continue therapy.

Formula: Allantoin 2% and special coal tar extract 5% in a lotion base.

Supplied: Bottles of 8 fl. oz.

(1) Flesch, P.: Reported Conf. N. Y. Academy Science May 9, 1958 (In Press). (2) Bleiberg, J., and Saltzman, J. A.: Clin. Med. 5:485 (Apr.) 1958. (3) Bleiberg, J.: Reported Conf. N. Y. Academy Science May 9, 1958 (In Press). (4) Clyman, S. G.: Reported Conf. N. Y. Academy Science May 9, 1958 (In Press). *Trademark

R&C **REED & CARNRICK** • Jersey City 6, New Jersey

Meat...

and Fat in the American Diet

In this era of public concern over the possibly deleterious influence of dietary fat on human health, a sober look at the facts as they exist today appears indicated.

After reviewing the evidence up to 1958, The Food and Nutrition Board of the National Research Council* defined the contribution of fat to American nutrition.

> "The human requirement for fat or for specific fatty acids, as well as the nutritional implications of a high content of fat in the diet, remains to be determined.
>
> "In the United States an average diet containing approximately 40 per cent of the calories in the form of fat has been consistent with the attainment of one of the best health patterns in the world."

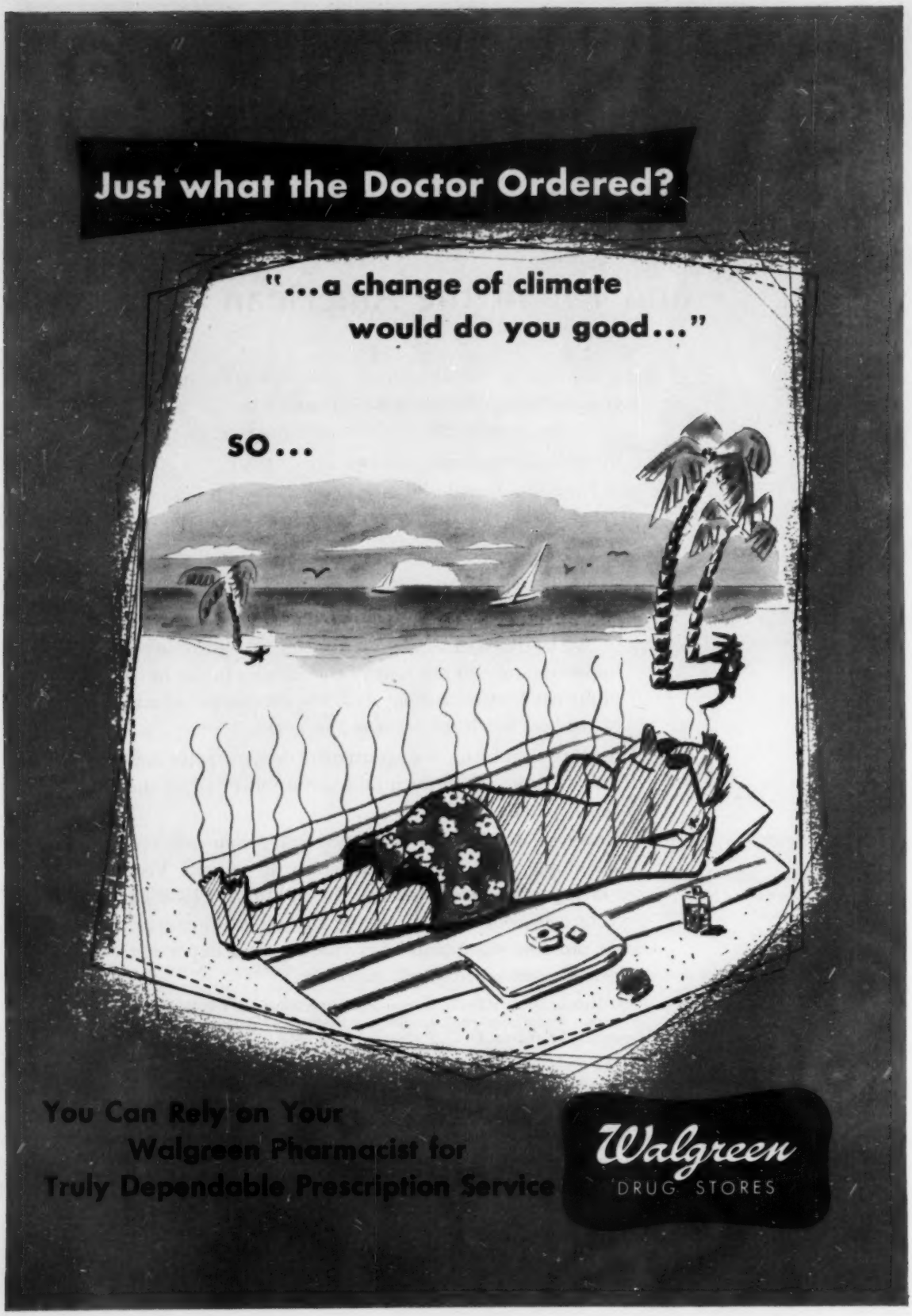
This statement by unbiased authority demonstrates that drastic curtailment of fat intake is not indicated on the basis of current evidence.

However, if special circumstances call for curtailment of fat intake, meat need not be denied the patient. Visible fat can be removed easily. In addition to its high protein contribution to tissue repair and maintenance, meat provides the gamut of B vitamins and important minerals essential to sound nutrition.

*The Role of Dietary Fat in Human Health: A Report of the Food and Nutrition Board, National Academy of Sciences—National Research Council, Washington, D. C., Publication 575, 1958.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

American Meat Institute
Main Office, Chicago...Members Throughout the United States


Just what the Doctor Ordered?
"...a change of climate would do you good..."
SO...
You Can Rely on Your Walgreen Pharmacist for Truly Dependable Prescription Service
Walgreen
DRUG STORES

TASTY is the word for... titralac®

UNIQUE ANTACID WITH MILK-LIKE ACTION

- creamy, mint flavor
- acts in seconds... lasts for hours
- non-constipating... no acid rebound

TITRALAC is effective in small doses. Two TITRALAC Tablets contain 0.36 Gm. glycine and 0.84 Gm. calcium carbonate. One teaspoonful TITRALAC Liquid approximates two tablets.

and with a SP synergistic...

TITRALAC®—SP

(TITRALAC formula + 0.5 mg. homatropine methylbromide)

Ref. U. S. Pat. Off.

Schein Labs

SCHEIN LABS PHARMACEUTICALS, Inc.
NEW YORK 1, N. Y.
Manufacturers of NEUTREXIN for penicillin reactions.

TITRALAC

NEW CERUMENO-SURFACTANT

FOR REMOVAL OF EXCESS OR IMPACTED CERUMEN

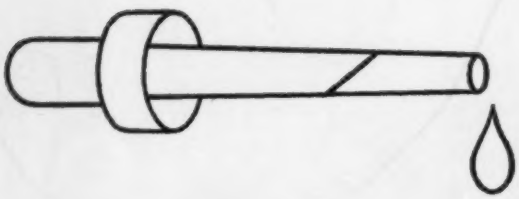
(CERUmen emulsification + simple LAVage)

CERULAV™

DROPS

BRAND OF TRIETHANOLAMINE POLYPEPTIDE OLEATE-CONDENSATE 10.0% IN PROPYLENE GLYCOL WITH CHLORBUTANOL 0.5%
U. S. & FOREIGN PATENTS PENDING

EMULSIFICATION
NOT INSTRUMENTATION



...achieved 97 per cent effective removal of hard, impacted ear wax in over 1000 human ears. The unique action of 'Cerulav' is directed to the hard 60 per cent protein content of the ear wax. 'Cerulav' penetrates this core and emulsifies it. The result is softening and loosening of the wax plug so that it may be removed by simple lavage.

Advantages of 'Cerulav' Drops

- demonstrated clinical effectiveness*
- pH that of normal ear canal surface
- quick, simple, non-irritating
- non-traumatic
- virtually non-allergenic and non-sensitizing
- effective in all ages
- wide patient acceptance

Supplied: 13cc. bottle with convenient blunt end dropper.

*Complete information upon request to the Medical Director.

THE G. F. HARVEY COMPANY, INC. SINCE 1880

PHARMACEUTICALS AND RESEARCH IN THE HARVEY TRADITION

©Copyright 1958, The G.F. Harvey Company, Inc., Saratoga Springs, New York

re-evaluating tranquilizers?

READ WHAT CLINICIANS ARE NOW SAYING ABOUT ATARAX®

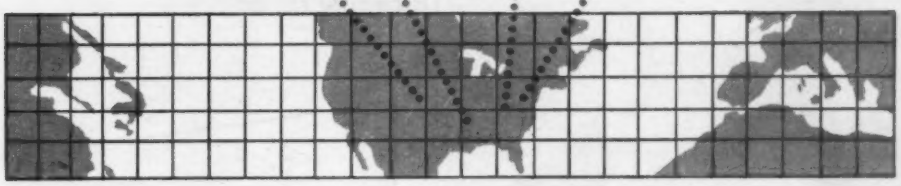
(brand of hydroxyzine)

IN GERIATRICS
"ability to decide correctly has increased, while the illogical response to anxiety has diminished."[1]

IN WORKING ADULTS
"especially well suited for ambulatory patients who must work, drive a car, or operate machinery."[2]

IN PEDIATRICS
"ATARAX appeared to reduce anxiety and restlessness, improve sleep patterns and make the child more amenable to the development of new patterns of behavior...."[3]

IN GENERAL
ATARAX is "effective in controlling tension and anxiety.... Its safety makes it an excellent drug for out-patient use in office practice."[4]



INVESTIGATORS AGREE ON OPTIMAL ATARAX DOSAGES

For childhood behavior disorders	10 mg. tablets	3-6 years, one tablet t.i.d. over 6 years, two tablets t.i.d.
	Syrup	3-6 years, one tsp. t.i.d. over 6 years, two tsp. t.i.d.
For adult tension and anxiety	25 mg. tablets	one tablet q.i.d.
	Syrup	one tbsp. q.i.d.
For severe emotional disturbances	100 mg. tablets	one tablet t.i.d.
For adult psychiatric and emotional emergencies	Parenteral Solution	25-50 mg. (1-2 cc.) intramuscularly, 3-4 times daily, at 4-hour intervals. Dosage for children under 12 not established.

Supplied: Tablets, bottles of 100. Syrup, pint bottles. Parenteral Solution, 10 cc. multiple-dose vials.

References: 1. Smigel, J. O., et al.: J. Am. Ger. Soc., in press. 2. Freedman, A. M.: Pediat. Clin. North America 5:573 (Aug.) 1958. 3. Ayd, F. J., Jr.: New York J. Med. 57:1742 (May 15) 1957. 4. Menger, H. C.: New York J. Med. 58:1684 (May 15) 1958. 5. Coirault, M., et al.: Presse méd. 64:2239 (Dec. 26) 1956. 6. Beyart, J.: Presented at the International Congress of Pediatrics, Copenhagen, Denmark, July 22-27, 1956.

ATARAX®

New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being

ANKLE SPRAINED or SINUS INFLAMED?

ACCELERATE THE RECOVERY PROCESS WITH

VARIDASE* BUCCAL TABLETS

STREPTOKINASE-STREPTODORNASE LEDERLE

*Reg. U.S. Pat. Off.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

CARDIAC ARREST

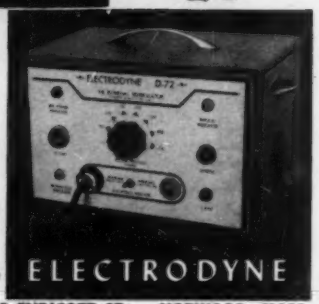
Working with Paul M. Zoll, M.D. and his research group in this specific field, Electrodyne has developed a family of medical equipment for preventive detection and treatment of cardiac arrest.

ELECTRODYNE PM-65 WITH (optional) ELECTROCARDIOSCOPE

Visually and audibly monitors heart action, instantly signals Cardiac Arrest, and automatically provides effective external stimulation.

ELECTRODYNE D-72

External defibrillator is a proven instrument for clinical treatment of ventricular fibrillation and persistant tachycardia through the unopened chest.

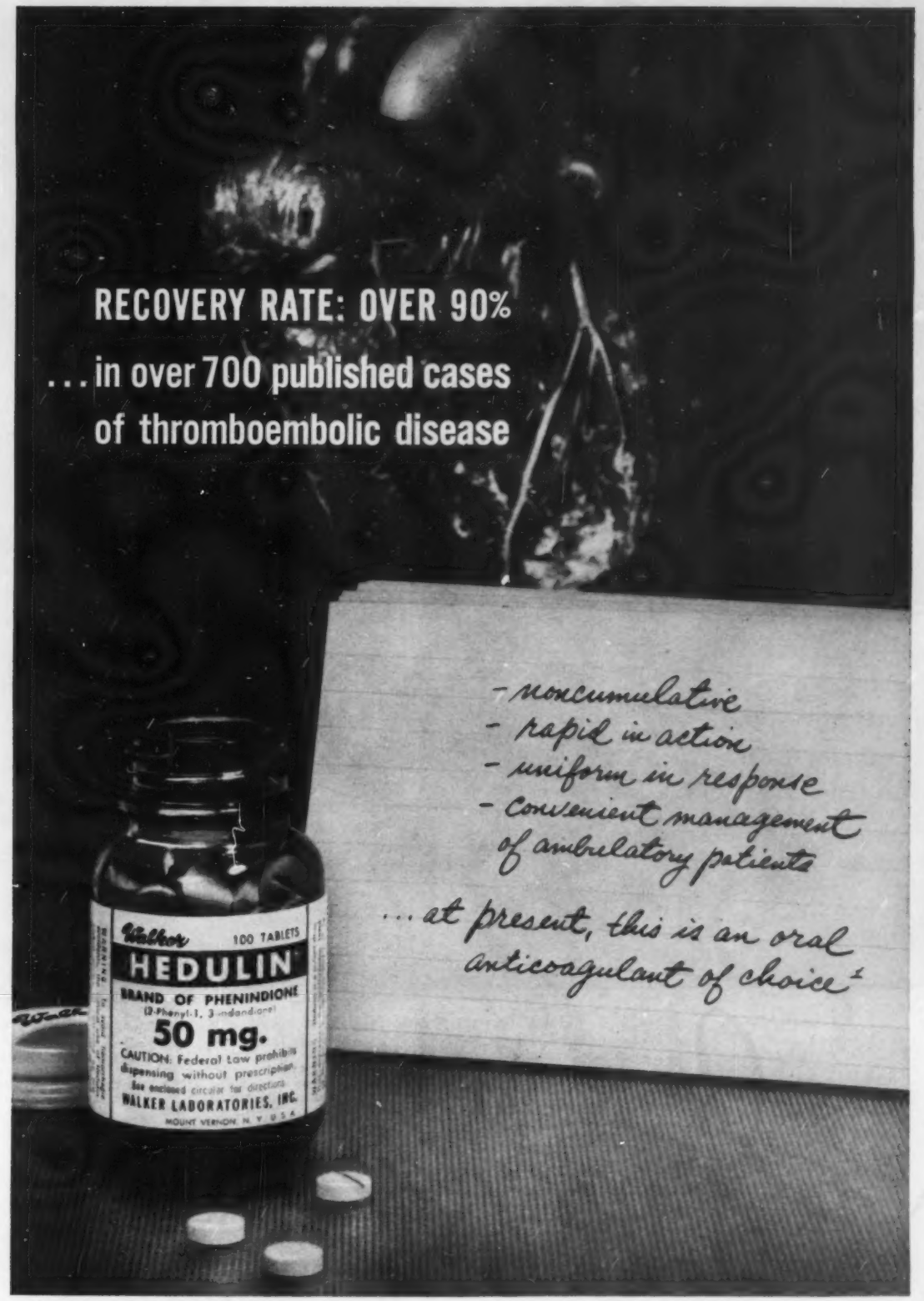


For further information write to:

ELECTRODYNE

ELECTRODYNE CO., INC. 15 ENDICOTT ST. NORWOOD, MASS.

"She lives in constant fear that it might be catching."



HEDULIN is the trademark for the Walker brand of phenindione. 50 mg. scored tablets for therapeutic use; 20 mg. scored tablets for prophylactic use. Bottles of 100 and 1,000. For a clinical trial supply of HEDULIN, write to WALKER LABORATORIES, INC., Mount Vernon, N. Y.

1. Breneman, G. M., and Priest, E. McC.: Am. Heart J. 50:129 (July) 1955.

NEW *Immolin*® CREAM-JEL

matrix "freezes," weakens and kills even the most viable sperm

NEW DEPENDABLE *Immolin* CREAM-JEL

The unique sperm-trapping matrix formed with explosive speed when semen meets IMMOLIN® Vaginal Cream-Jel accounts for the outstanding effectiveness of this new contraceptive.

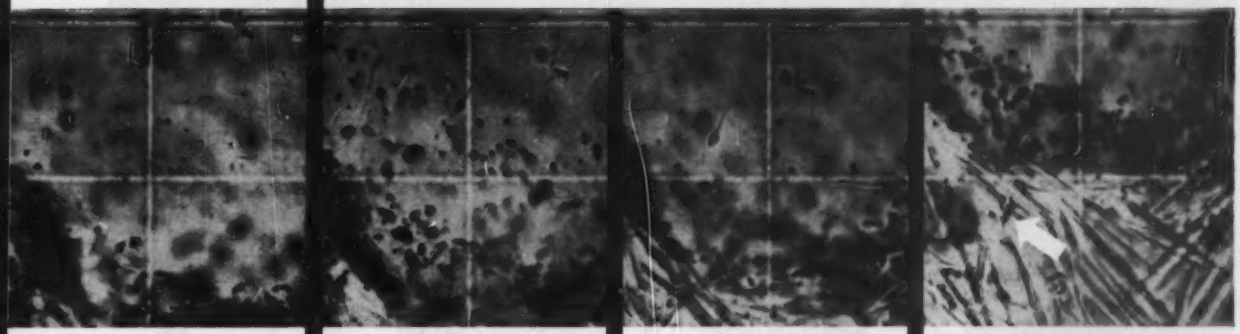
LOW PREGNANCY RATE

With this new contraceptive technique, a pregnancy rate of 2.01 per 100 woman-years of exposure is reported.* These patients were followed up for 4 to 28 months, comprising 1,792 patient-months. As Dr. Goldstein noted, "This extremely low pregnancy rate indicates that IMMOLIN Cream-Jel used without an occlusive device is an efficient and dependable contraceptive."

*Goldstein, L. Z.: Obst. & Gynec. *10*:133 (Aug.) 1957.

SPERM PHOTOGRAPHY NEVER BEFORE ACCOMPLISHED!

These unusual pictures, taken at high speed and at almost 1000 times magnification, show a single sperm as it "freezes," weakens and dies in the IMMOLIN Cream-Jel matrix–*within the distance it normally travels in one-quarter of a second.*



1 TRAPPED This highly motile, viable sperm becomes non-reproductive the instant it contacts IMMOLIN Cream-Jel.

2 WEAKENED Devitalized and no longer motile, the sperm swerves from line of travel and is pulled aside by spreading matrix.

3 KILLED Motion, whiplash stop as sperm succumbs to matrix.

4 BURIED The dead sperm is trapped deep in the impenetrable IMMOLIN Cream-Jel matrix.

***75**th anniversary*
1883-1958
service to the medical and drug professions

JULIUS SCHMID, INC.
423 West 55th Street, New York 19, N.Y.

IMMOLIN is a registered trade-mark of Julius Schmid, Inc.

1. TODAY'S KNOWLEDGE OF NUTRITION by Elmer Verner McCollum, Ph.D.
2. FOOD FOR ENERGY by Hazel M. Hauck, Ph.D.
3. OUR PROTEIN NEEDS by H. H. Mitchell, Ph.D.
4. OUR CHIEF MINERAL NEEDS by Genevieve Stearns, Ph.D.
5. WHY VITAMINS? by C. A. Elvehjem, Ph.D.
6. WHAT IS GOOD NUTRITION? by Ruth M. Leverton, Ph.D.
7. KEEPING THE VALUES IN FOOD by Bernice K. Watt, Ph.D. & Hazel K. Stiebeling, Ph.D.
8. ADOLESCENT NUTRITION by Margaret A. Eppright, Ph.D.
9. UNDERFED OR POORLY FED? by Grace A. Goldsmith, M.D.
10. WHAT SHOULD OLDSTERS EAT? by Helen L. Gillum, Ph.D.
11. DIET FOR MOTHERS-TO-BE by Icie G. Macy, Ph.D., Sc.D.
12. HOW TO EAT WELL AND REDUCE SENSIBLY by Helen S. Mitchell, Ph.D.

12 PAMPHLETS ON NUTRITION

written by eminent nutrition scientists and presented in TODAY'S HEALTH by the Bureau of Health Education and the Council on Foods and Nutrition of the American Medical Association. These pamphlets are available for 15 cents apiece . . . quantity discounts available.

ORDER DEPARTMENT
AMERICAN MEDICAL ASSOCIATION
535 N. DEARBORN ST., CHICAGO 10, ILL.

Enclosed is $_____ for the following pamphlets:
(indicate quantity of each pamphlet)

1._____ 4._____ 7._____ 10._____
2._____ 5._____ 8._____ 11._____
3._____ 6._____ 9._____ 12._____

NAME_____
STREET_____
CITY_____ ZONE____ STATE_____

"I find it easier to give up cigarettes just after I've finished smoking one."

"I told her I love her but she wouldn't believe me until I let her check my temperature!"

This four part summary of the Gesell findings in child development by Jack Harrison Pollack has been reprinted from TODAY'S HEALTH. *Pamphlets 20c each, set of four 75c, quantity discounts.*

Gesell Predicts Your Child's Development

Part 1. "The First Five Years"
Part 2. "Ages Six Through Ten"
Part 3. "Ages Eleven Through Sixteen"
Part 4. "Adolescence—The Difficult Years"

ORDER DEPARTMENT
AMERICAN MEDICAL ASSOCIATION
535 N. DEARBORN ST., CHICAGO 10, ILL.

Enclosed is $_____ for the following pamphlets:
(Indicate quantity of each pamphlet)

1._____ 2._____ 3._____ 4._____

NAME_____

STREET_____

CITY_____ ZONE____ STATE_____

"Much better—

COSA-TETRACYN*

GLUCOSAMINE POTENTIATED TETRACYCLINE

CAPSULES
(black and white)
250 mg., 125 mg.

ORAL SUSPENSION
(orange-flavored)
125 mg. per tsp. (5 cc.), 2 oz. bottle

NEW! PEDIATRIC DROPS
(orange-flavored) 5 mg. per drop, calibrated dropper, 10 cc. bottle

COSA-TETRASTATIN*

glucosamine potentiated tetracycline with nystatin

antibacterial plus added protection against monilial superinfection

CAPSULES (black and pink) 250 mg. Cosa-Tetracyn, (with 250,000 u. nystatin)

ORAL SUSPENSION 125 mg. per tsp. (5 cc.) Cosa-Tetracyn, (with 125,000 u. nystatin), 2 oz. bottle

REFERENCES: 1. Carlozzi, M.: Ant. Med. & Clin. Therapy 5:146 (Feb.) 1958. 2. Welch, H.; Wright, W. W., and Staffa, A. W.: Ant. Med. & Clin. Therapy 5:52 (Jan.) 1958. 3. Marlow, A. A., and Bartlett, G. R.: Glucosamine and Leukemia. Proc. Soc. Exp. Biol. & Med. 84:41, 1953. 4. Shalowitz, M.: Clin. Rev. 1:25 (April) 1958. 5. Nathan, L. A.: Arch. Pediat. 75:251 (June) 1958. 6. Cornbleet, T.; Chesrow, E., and Barsky, S.: Ant. Med & Clin. Therapy 5:328 (May) 1958. 7. Stone, M. L.; Sedlis, A., Bamford, J., and Bradley, W.: Ant. Med. & Clin. Therapy 5:322 (May) 1958. 8. Harris, H.: Clin. Rev. 1:15 (July) 1958.

–thank you, doctor"

Proven in research

1. High tetracycline serum levels
2. Consistently elevated serum levels
3. Well-tolerated, physiologic potentiation

And now in practice

4. Rapid clinical response
5. Unexcelled toleration

Pfizer *Science for the world's well-being*
PFIZER LABORATORIES
Div., Chas. Pfizer and Co., Inc.
Brooklyn 6, New York

*Trademark

9 SPECIALTY JOURNALS

PUBLISHED MONTHLY

BY THE AMERICAN MEDICAL ASSOCIATION

NEUROLOGY AND PSYCHIATRY

DISEASES OF CHILDREN

INTERNAL MEDICINE

INDUSTRIAL HEALTH

OTOLARYNGOLOGY

OPHTHALMOLOGY

DERMATOLOGY

PATHOLOGY

SURGERY

each journal offers
the latest medical findings by
outstanding authorities in
its special field . . .
of value not only
to the specialist but
to the general practitioner as well

to order your subscription to one of the A.M.A.'s
specialty journals use the form below

AMERICAN MEDICAL ASSOCIATION
535 North Dearborn • Chicago 10

Please enter my subscription to the specialty journal checked at right. Start my subscription with the next issue.
Remittance for ☐ one year ☐ two years is enclosed.

NAME_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

	U.S.A. & Possessions APO's	Canada	Outside U.S.A. & Possessions
☐ A.M.A. Arch. Neurology and Psychiatry	$14.00	$14.50	$15.50
☐ A.M.A. Arch. Dermatology	12.00	12.50	13.50
☐ A.M.A. Arch. Industrial Health	10.00	10.50	11.50
☐ A.M.A. Arch. Internal Medicine	10.00	10.50	11.50
☐ A.M.A. Jrl. Diseases of Children	12.00	12.50	13.50
☐ A.M.A. Arch. Surgery	14.00	14.50	15.50
☐ A.M.A. Arch. Pathology	10.00	10.50	11.50
☐ A.M.A. Arch. Ophthalmology	12.00	12.50	13.50
☐ A.M.A. Arch. Otolaryngology	14.00	14.50	15.50

Fulfills Both Needs
for the Anginal Patient

FEWER
▶ LESS SEVERE
ATTACKS

▶ FREEDOM
FROM FEAR

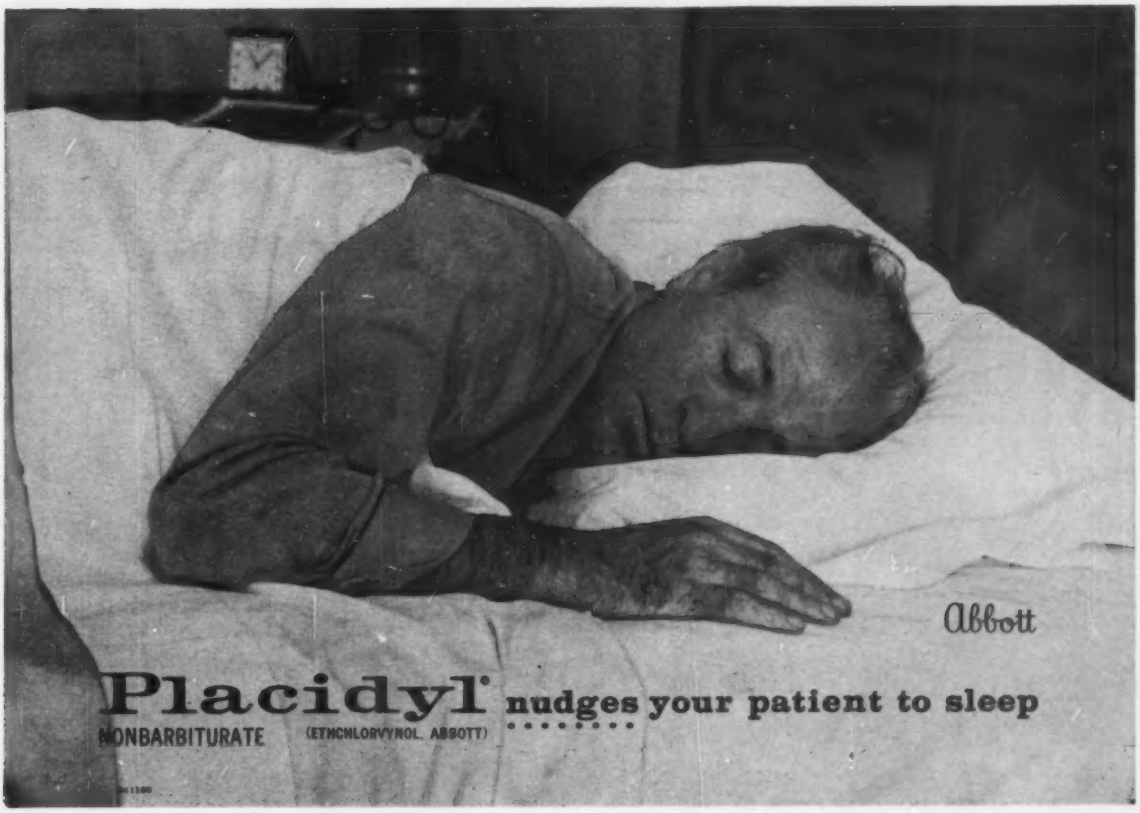
Pentoxylon

Tablets Containing Pentaerythritol Tetranitrate (PETN) 10 mg. and Rauwiloid® (Alseroxylon) 0.5 mg.

Patients with angina pectoris obtain BOTH types of protection with Pentoxylon... prolonged coronary vasodilatation AND relief from anxiety. Fear of the next attack is replaced by pulse-slowing, calming action.

DOSAGE: 1 to 2 tablets q.i.d. before meals and on retiring.

Riker
Northridge, California



ACHROM
ACHROM
ACHROM
ACHROM
ACHROM
ACHROM
ACHROM

Tetracycline with Citric Acid *LEDERLE*

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York Lederle

INDEX TO ADVERTISERS

FIRM — PAGE

A

Abbott Laboratories 48, 284, 285, 303
American College of Surgeons....307
American Cyanamid Co., Fine Chemicals Division....43, 44, 252, 262, 292, 304, 305
American Meat Institute....289
Ames Co., Inc. 37, 256
Armour Laboratories 64, 65
Aveeno Corp. 246
Ayerst Laboratories 283

B

Bellevue Place 307
Blue Shield Commission....56
Bristol Laboratories, Inc. 61, 62
Burroughs Wellcome & Co., Inc. 30, 31, 247

C

Camp, S. H., & Co. 250
Castle, Wilmot Co. 276
Chesebrough Mfg. Co., Cons'd....264
Ciba Pharmaceutical Products, Inc. 11, 71
Coca-Cola Co. 286
Colwell Publishing Co. 276

D

Dietene Co. 243
Dome Chemicals, Inc. 272
Duke Laboratories, Inc. 272

E

Eaton Laboratories, Inc. 254, 255
Endo Laboratories, Inc. 78

F

Fellows Medical Mfg. Co. 246
Florida Citrus Commission....63

G

Geigy Pharmaceuticals....72, 259, 260
General Electric Co. 273
Gerber Products Co. 263
Gomco Surgical Mfg. Corp. 262
Grune & Stratton, Inc. 7

H

Harvard University Press....270
Harvey, G. F., Co. 292
Hoeber, Paul B., Inc. 8, 9

I

Irwin, Neisler & Co. 244

J

Johnson & Johnson....12

L

Lakeside Laboratories, Inc. 54, 55
Las Encinas 307
Lea & Febiger....5
Leeming, Thomas, & Co. 35
Lilly, Eli, & Co. 82
Lippincott, J. B., Co. 4
Logos Press Inc. 248
Lundstrom, C. J., Mfg. Co. 276

M

Malt-O-Meal 249
McNeil Laboratories, Inc. 47, 251
Mead Johnson & Co. ....Fourth Cover
Medical Bureau 252
Merck Sharp & Dohme; Division of Merck & Co., Inc. 66, 67
Merrell, William S., Co. 265
Mosby, C. V., Co. 10

N

National Drug Co. 240
New York Medical Exchange....266
New York Polyclinic Medical School & Hospital....307
North Shore Hospital....307
Num Specialty Co. 306

O

Ortho Pharmaceutical Corp. 22

P

Parke, Davis & Co. 20, 21, 52, 53, 74, 75
Pelton & Crane Co. 270
Pfizer, Chas., & Co., Inc. 49, 300, 301
Photovolt Corp. 248
Pitman-Moore Co. 36
Plough, Inc. 245
Purdue Frederick 257
Putnam 306

R

Reed & Carnrick....13, 288
Revlon Products Corp. 253
Riker Laboratories, Inc. 28, 303
Ritter Co., Inc. 266
Robert James 307
Robins, A. H., Co., Inc. 242, 282, 308
Roche Labs. 76, 77, 277
Roerig, J. B., & Co. 41, 69, 293
Rorer, Wm. H., Inc. 258

S

Sanborn Co. 18
Saunders, W. B., Co. ..Front Cover, Second Cover, 3
Scandinavian Airlines 244
Schenlabs Pharmaceuticals, Inc. 291
Schering Corp. 57, 248, 279
Schmid, Julius, Inc. 60, 296, 297
Searle, G. D., & Co. 239
Seven-Up Co. 267
Shay Medical Agency....250
Smith Dorsey 261
Smith Kline & French Labs....16, 17
Squibb, E. R., & Sons....54, 80, 81
Sterling Drug, Inc....68
Surgical Mechanical Research, Inc. 270

T

Tailby-Nason, Division of International Latex Corp. 73
Taylor Instrument Companies....274
Training School 307

U

Upjohn Co. 14, 15, 59

W

Walgreen Drug Stores....290
Walker Laboratories 295
Wallace Laboratories 33, 38, 39, 268, 269, 275, 281
Warner-Chilcott Laboratories Division....51
Westwood Pharmaceuticals, Division of Foster Milburn Co. 34
White Laboratories, Inc. 79
Whittaker Laboratories, Inc. 307
Williams & Wilkins Co. 6
Willows Maternity Sanitarium....307
Winthrop Laboratories, Inc. ....Third Cover
Woodward Medical Personnel Bureau....247, 266
Wyeth Laboratories 19, 27, 241
Wynn 45

(Books Received Continued)

Aviation Medicine: An Annotated Bibliography. Volume 2: 1953 Literature. By Arnold J. Jacobius and others. Bibliography Section, Science and Technology Division, Library of Congress. Paper. $5. Pp. 354. Aero Medical Association, 2642 University Ave., St. Paul 14, Minn., 1959.

Transactions of the Association of American Physicians. Volume LXXI: Seventy-first Session Held at Atlantic City, N. J., May 6 and 7, 1958. Cloth. Pp. 340, with illustrations. Recorder: A. McGehee Harvey, Johns Hopkins Hospital, Baltimore 5, 1958.

Cardiac Arrest and Resuscitation. By Hugh E. Stephenson, Jr., M.D., Professor and Chairman, Department of Surgery, University of Missouri School of Medicine, Columbia. Cloth. $12. Pp. 378, with 31 illustrations. C. V. Mosby Company, 3207 Washington Blvd., St. Louis 3, 1958.

Nursing Care of Patients with Eye, Ear, Nose and Throat Disorders. By Mary Estelle Shepard, R.N., B.S., M.A. Cloth. $4. Pp. 266, with 35 illustrations. The Macmillan Company, 60 Fifth Ave., New York 11; Brett-Macmillan, Ltd., 132 Water St., S., Galt, Ontario, Canada, 1958.

Proceedings of the Forty-sixth Annual Meeting of the Medical Section of the American Life Convention, June 9, 10, 11, 1958, the Broadmoor, Colorado Springs, Colorado. Paper. Pp. 238, with 1 illustration. American Life Convention, 230 N. Michigan Ave., Chicago 1, 1958.

Good Stories and How to Tell Them: A Collection of Appropriate Stories for Speakers with Instructions About the Best Way to Tell Them. By V. Spencer Goodreds. Cloth. $3.95. Pp. 250. T. S. Denison & Company, 321 Fifth Ave. S., Minneapolis 15, 1958.

Le algie periauricolari. Di Giancarlo Zaoli. Arch. ital. otol., vol. 69, supp. 35. Paper. Pp. 133, with 19 illustrations. Archivio italiano di otologia, rinologia e laringologia, Via F. Sforza 40, Milan, Italy, 1958.

Pratique pneumologique: Conduite diagnostique et thérapeutique. Par Paul Fréour et Maurice Serisé. Paper. 3000 francs. Pp. 416, with 48 illustrations. L'Expansion scientifique française, 15, rue Saint-Benoit, Paris 6e, France, 1958.

Le reflux gastro-oesophagien. Par P. Blondet, J. Gaillard, et P. Michaud. Préface du professeur P. Mounier-Kuhn. Paper. 2600 francs. Pp. 158, with 34 illustrations. L'Expansion scientifique française, 15, rue Saint-Benoit, Paris 6e, France, 1958.

L'allergie dans l'asthme. Par R. Pautrizel et G. Cabanieu, Préface du professeur P. Broustet. Paper. 1300 francs, Pp. 182, with 20 illustrations. L'Expansion scientifique française, 15, rue Saint-Benoit, Paris 6e, France, 1958.

Octavo Congreso uruguayo de cirugía, 1957, 10-12 de diciembre. Tomo II. Sede: Parque Hotel, Rambla Presidente Wilson. Paper. Pp. 257, with illustrations. Secretaria general: Avda. Agraciada, 1464, Piso 13, Montevideo, Uruguay, 1958.

Federal Agencies Financing Research. Social Legislation Information Service, document 10. Paper. Loose-leaf. $1. No pagination. Social Legislation Information Service, Inc., 1346 Connecticut Ave., N. W., Washington 6, D. C., 1958.

Tumors of the Lungs and Mediastinum. By B. M. Fried, M.D., F.C.C.P., Associate Attending Physician, Montefiore Hospital, New York. Cloth. $13.50. Pp. 467, with 235 illustrations. Lea & Febiger, Washington Sq., Philadelphia 6, 1958.

Encyclopedia of the Papacy. By Hans Kühner. Translated from original German *Lexikon der Paepste* by Kenneth J. Northcott. Cloth. $6. Pp. 249, with 16 illustrations. Philosophical Library, Inc., 15 E. 40th St., New York 16, 1958.

The World Traveler's Medical Guide. By Richard Travis Atkins, M.D., and Jane McGlennon Atkins. Paper. $1.95. Pp. 399. Simon & Schuster, 630 Fifth Ave., Rockefeller Center, New York 20, 1958.

Basic Principles of Parliamentary Law and Protocol. By Marguerite Grumme. Second edition. Paper. $1. Pp. 68. Marguerite Grumme, 3830 Humphrey St., St. Louis 16, 1958.

Recommend Thum—At All Drug Stores

The Chicago Committee on Trauma
of the American College of Surgeons

THIRD POSTGRADUATE COURSE IN FRACTURES AND OTHER TRAUMA

April 15, 16, 17, 18, 1959

at the John B. Murphy Memorial Auditorium, 50 E. Erie St., Chicago 11, Ill.

ALL PHASES OF TRAUMA WILL BE DISCUSSED BY LEADING TEACHERS FROM CHICAGO'S FIVE MEDICAL SCHOOLS AND LEADING HOSPITALS, AND AUTHORITIES FROM OTHER CITIES. Also illustrated lectures, patient demonstrations, and question and answer periods.

Registration fee: $75.00. Residents, interns, students free upon identification from chief of service or dean.

For application forms or information, address: Dr. John J. Fahey, Chairman, Program Committee, 1791 West Howard Street, Chicago 26, Illinois.

For The Mentally Retarded Child

SIX COMPREHENSIVE PROGRAMS

- Observation and Diagnosis
- Education and Training
- Residential Supervision
- Custodial Care
- Summer Program
- Psychiatric Treatment Center

Established 1888, The Training School at Vineland provides care and treatment for boys and girls 2 years or older with mental potential of 6 years. Complete professional staff. Electroencephalographic and neurological examinations, individual psychiatric, psychological, physiological, and speech observations and therapies. Cottage system. Hospital, school, chapel, lake, pools, farm on 1600-acre estate.

For information write: **Box K**

The Training School at Vineland, New Jersey

NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL

The Pioneer Post-Graduate Medical Institution in America
—Organized 1881

ANNOUNCES

EVENING COURSES FOR THE GENERAL PRACTITIONER

One session per week for eight weeks—9 to 10:30 P. M.

APRIL 1st and OCTOBER 1st

1. Allergy
2. Regional Anesthesia
3. Cardiology & Electrocardiography
4. Gynecological Endocrinology
5. Internal Medicine
6. Obstetrical Care of the Private Patient
7. Office Procedures in Otolaryngology
8. Pediatrics—Problems and Diseases of the Newborn
9. Radiology—Clinical Interpretation for the General Practitioner
10. Office Treatment of Trauma

(These courses have been approved for Category I credit by the American Academy of General Practice.)

For Information about these and other Courses, Address:

THE DEAN,

345 West 50th Street, New York 19, N. Y.

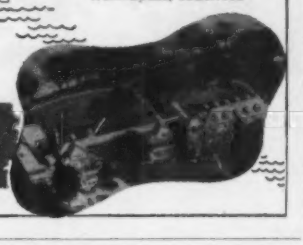
Fully Accredited

NORTH SHORE HOSPITAL

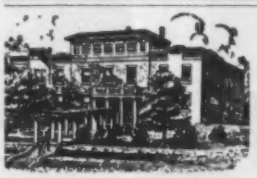
—for psychiatric treatment and research

on the shores of Lake Michigan
WINNETKA, ILLINOIS

Care and treatment of emotional disorders



For information contact
SAMUEL LIEBMAN, M.D., F.A.P.A.
Medical Director
225 Sheridan Rd. — Hillcrest 6-0211



The Willows Maternity Sanitarium, Inc.

Since 1906

Competent, ethical services for expectant mothers, spacious recreation grounds. Patients accepted any time. Early entrance advised. Adoptions through Juvenile Court. Rates reasonable and adapted to patient's needs. Complete Medical Staff. Address:

MRS. DON D. HAWORTH, Supt.

2927 Main St., Kansas City 8, Mo. **Tel. Westport 1-2104**

Las Encinas

2900 E. DEL MAR BLVD.
SY 3-7193 * RY 1-9339
INTERNAL MEDICINE
NERVOUS DISORDERS
C. W. Thompson, M.D., F.A.C.P., Director
PASADENA, CALIFORNIA

Personalized Duplicate Receipt Book

A complete cash control system for only $7.00. 500 originals (perforated) 500 duplicates (permanently bound). Each receipt personalized and numbered—fine sulphite bond paper. Send your card or letterhead. We will design the correct receipt for you and send for your approval.

ROBERT JAMES CO. P. O. BOX 842 BIRMINGHAM 1, ALA.

BELLEVUE PLACE

for

Nervous and Mental Diseases

EDWARD ROSS, M.D., Medical Director

BATAVIA, ILLINOIS PHONE: BATAVIA 1520

24 years of successful use

TRIOXYMETHYLENE 0.04%
SODIUM OLEATE 0.67%

No finer name in contraceptives

Whittaker Laboratories, Inc., Peekskill, N. Y.

Dimetane® (PARABROMDYLAMINE MALEATE) works!

Whatever the allergic symptom, Dimetane provides unexcelled antihistaminic potency and minimal side effects. Dimetane works in certain cases where other antihistamines fail. For your next case of pruritus or urticaria prescribe Dimetane Extentabs® (12 mg.), Tablets (4 mg.), Elixir (2 mg./5 cc.), Dimetane-Ten Injectable (10 mg./cc.) or Dimetane-100 Injectable (100 mg./cc.). A. H. Robins Co., Inc., Richmond 20, Virginia/Ethical Pharmaceuticals of Merit Since 1878

Robins

The "Snifflers"

they always have

red noses and the sniffles

colds run in their family

When they bring their sore noses and congested heads to you for relief – there's a whole family of reliable vasoconstrictor-decongestive Neo-Synephrine products ready to give them quick and lasting comfort.

The NEO-SYNEPHRINE® *hydrochloride*

"cold comfort" family:

- **Prompt and Prolonged Decongestion**
- **Sinus Drainage and Aeration**
- **In practically all cases**

NO IRRITATION
NO SEDATION
NO EXCITATION

Nasal Solutions 0.25%, 0.5% and 1%

Adult Nasal Spray 0.5%
Pediatric Nasal Spray 0.25%

plastic, unbreakable squeeze bottles, leakproof, deliver a fine mist.

with Zephiran® chloride 1:5000, antibacterial wetting agent and preservative for greater efficiency

Winthrop LABORATORIES
NEW YORK 18, N. Y.

Neo-Synephrine (brand of phenylephrine) and Zephiran (brand of benzalkonium, as chloride, refined), trademarks reg. U. S. Pat. Off.

nutritional therapy *in convalescence*

to accelerate convalescence...

Sustagen®

Complete food, Mead Johnson
powder

Builds tissue, promotes well-being, enhances rehabilitation

Specific treatment may vary infinitely in details, but one factor remains constant—the urgent need of every seriously ill patient for *therapeutic nutrition.*

With Sustagen you can give your patients extra nutritional reserves which they need to withstand both medical and surgical crises and debilitating diseases.

Sustagen in itself is a balanced diet and can be given by mouth or by tube. It can be used alone or as a supplement to the diet, for short term or prolonged nutritional therapy. Sustagen supplies every known essential nutrient for maintenance or rehabilitation.

Detailed information on the use of Sustagen in many clinical conditions is provided in the booklet "Nutritional Therapy: The Use of Food in the Management of Illness and Injury." Your Mead Johnson Representative will gladly supply you with a copy...or you may write to us, Evansville 21, Indiana.

Mead Johnson
Symbol of service in medicine

SU660